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STRUCTURAL ANALYSIS OF CYLINDRICAL THRUST CHAMBERS FINAL REPORT VOLUME III

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H. J. Kasper, NASA Technical Monitor

16. Abstract

A system of three computer programs is described for use in conjunction with the BOPACE finite element program. The programs are demonstrated by analyzing cumulative plastic deformations in a regeneratively cooled rocket thrust chamber. The codes provide the capability to predict geometric and material nonlinear behavior of cyclically loaded structures without performing a cycle-by-cycle analysis over the life of the structure. The program set consists a BOPACE restart tape reader routine, an extrapolation program and a plot package.

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FOREWORD

This final report was prepared by Lockheed Missiles & Space Company, Inc., Huntsville, Alabama, for Lewis Research Center (LeRC), National Aeronautics and Space Administration, Cleveland, Ohio. The development of the nodal point extrapolation computer program was conducted in accordance with requirements of Contract NAS3-21953 "Structural Analysis of Cylindrical Thrust Chambers." The study was under the cognizance of H. J. Kasper of NASA-LeRC and is in conjunction with the effort reported in Ref. 1.

The computer program development and documentation were conducted by M. L. Pearson.

CONTENTS

1. SUMMARY

A computer program was developed for extrapolating nodal displacements computed by BOPACE for cylindrical thrust chamber structural models. This program automates the manual extrapolation method employed in the study described in Ref. 2. This program along with the accompaning plot package was utilized in the most recent effort reported in Ref. 1.

The program is capable of extrapolating displacements of up to 200 nodes for BOPACE models. The user has the option of extrapolating up to and including three components of the computed nodal displacement vector referred to the global cylindrical coordinate system. This option permits the user to neglect zero or near-zero components of the displacement vector when predicting deformed configurations.

The input and output of the extrapolation program are compatible with version 6 of BOPACE (Ref. 3). The extrapolation procedure utilizes a linear least squares approximation to establish the computed rate of change of displacement (inch per cycle) of each selected node for a user specified number of cycles of computed displacements. Each nodal displacement rate is used to extrapolate from the last computed nodal positions over a user specified number of constant cycles n to predict the deformed configuration at the end of the n^{th} cycle.

A plot routine is included so predicted configurations can be inspected after each extrapolation.

2. INTRODUCTION

A system of three computer programs is described for use in conjunction with BOPACE for analyzing the cumulative plastic deformation characteristics of regeneratively cooled rocket thrust chambers. The extrapolation program is used to extrapolate nodal displacements over a range of user specified cycles. The plotting program is used to display the predicted configurations for user examination at each stage of extrapolation. The plotting programs may also be used to plot the undeformed configuration for model verification. Configurations computed by BOPACE may be plotted also. A BOPACE restart tape reader routine is included for retrieving the computed nodal displacements from BOPACE restart tapes for extrapolation and/or plotting.

Card input/output is used as the transfer medium between BOPACE, the extrapolation program and the plotting program. This provides the user with complete flexibility in the choice of configurations to plot, extrapolate, and feed back to BOPACE for additional computation.

A typical operational sequence utilizing these computational tools is illustrated by the following steps:

1. Prepare the NODE and element definition cards for a BOPACE model and feed these directly to the plotter for verification of the model.
2. Execute BOPACE for a desired number of cycles.
3. Select the computed cycles desired for use as the basis for extrapolation and execute the tape reader routine to punch the computed nodal displacements for these cycles.
4. Input these displacements, along with the base configurations nodal coordinates (NODE cards) to the extrapolation program and extrapolate over a range of cycles.

5. Plot the predicted configurations and examine.
6. Select the extrapolated configurations desired and return to Step 2 and repeat the procedure for additional BOPACE runs and extrapolations.

3. NODAL EXTRAPOLATION PROGRAM

3.1 EXTRAPOLATION METHOD

The extrapolation procedure utilizes a linear least squares approximation to establish the computed rate of change of displacement (inch per cycle) of each node for a user specified number of cycles of computed displacements.

The basic form of the equation for a linear least squares curve fit is

$$y = c_1 + c_2 x$$

where

y represents a nodal displacement to be predicted at cycle x.

The normal equations for a curve fit of the kth node in a single coordinate direction are:

$$n\,c_1^k + \left[\sum_{i=1}^{n} x_i\right] c_2^k = \sum_{i=1}^{n} y_i^k, \text{ and} \qquad (1)$$

$$\left[\sum_{i=1}^{n} x_i\right] c_1^k + \left[\sum_{i=1}^{n} (x_i)^2\right] c_2^k = \sum_{i=1}^{n} x_i\, y_i^k \qquad (2)$$

where

n = number of cycles used for extrapolation
x_i = i^{th} cycle number

y_i^k = displacement of k^{th} node at the i^{th} cycle

c_1^k, c_2^k = extrapolation constants for the k^{th} node

The solution of the two normal equations yields

$$c_1^k = \frac{\left[\sum_{i=1}^{n} (x_i)^2\right]\left[\sum_{i=1}^{n} y_i^k\right] - \left[\sum_{i=1}^{n} x_i\right]\left[\sum_{i=1}^{n} x_i y_i^k\right]}{D}$$

and

$$c_2^k = \frac{n\left[\sum_{i=1}^{n} x_i y_i^k\right] - \left[\sum_{i=1}^{n} x_i\right]\left[\sum_{i=1}^{n} y_i^k\right]}{D}$$

where

$$D = n\left[\sum_{i=1}^{n} (x_i)^2\right] - \left[\sum_{i=1}^{n} x_i\right]^2 .$$

Therefore the displacement of the k^{th} node for a single coordinate direction, extrapolated to the j^{th} cycle, becomes:

$$y_j^k = c_1^k + (c_2^k)(j)$$

This procedure is repeated, with new constants c_1^k and c_2^k being calculated, for each coordinate direction specified, and for all nodes in the structural model.

3.2 USER'S GUIDE

All input data to the extrapolation programs is "fixed field", i.e., all data items must be punched in the prescribed card columns as defined below.

All cards must be input in the order described. There are no defaults for any data items. All items must be given.

Card 1 - Title Card

List: Title
Format (80A1)

Description

Title - Any Hollerith characters

Example

OFHC/EFCU THRUST CHAMBER

Comments

Provides a title for the extrapolation.

Card 2 - Extrapolation Control Card

List: NN NC NCX
Format (3I5)

Description

NN - Number of nodes (NN $\leq$ 200)

NC - Number of cycles used for extrapolation (NC $\leq$ 6)

NCX - Number of extrapolated cycles (NCX $\leq$ 6)

Example

100 3 5

Comments

A maximum of 6 cycles may be used for extrapolating.

A maximum of 6 extrapolated cycles may be computed.

Card 3 - List of Cycles Used for Extrapolation

List: ICYCLE(1) ICYCLE(2) ... ICYCLE(NC)
Format (6I5)

Description

ICYCLE(n) - Cycle number used for extrapolation

Example

108 109 110

Comments

NC values are input

These are the cycles used for the extrapolation

They do not have to be consecutive, e.g., cycles 106, 108, and 110 could be used.

Card 4 - List of Extrapolated Cycles

List: ICX(1) ICS(2) ... ICS(NCX)
Format (6I5)

Description

ICX(n) - Cycle number of extrapolated cycle

Example

110 120 130 140 150

Comments

A computed versus extrapolated variation in percent is calculated based on differences between the last computed cycle, i.e., ICYCLE (NC), and the first extrapolated cycle, i.c., ICX(1). Therefore, the last computed cycle should be the first extrapolated cycle for this check to be meaningful.

Card 5 - Coordinate Direction Extrapolation Control

List: IR ITHETA IZ

Format (3I1)

Description

IR - Extrapolation control for the R-coordinate

IR = 1 extrapolation performed
IR = 0 no extrapolation in R-direction

ITHETA - Extrapolation control for the θ coordinate direction

IZ - Extrapolation control for the z-coordinate direction.

Example

100

Comments

Extrapolation of BOPACE nodal displacement components may be performed for any or all three component directions in a cylindrical coordinate system. The example calls for extrapolation in the radial (R) direction only.

Card 6 - Base Configuration Title Card

List: Title

Format (80A1)

Description

Title - Any Hollerith characters

Example

OFHC/EFCU CYCLE 100 BASE CONFIGURATION

Comments

Provides a title for the nodal coordinate data which follows as the next input item.

Cards 6A - Base Configuration Nodal Coordinates

List: NODEID R THETA Z LID DID SPC
Format ('NODE', 4X, I4, 12X, 3F8.0, 3I8)

Description

NODEID - Node identification number
R - R coordinate value
THETA - Theta coordinate value defined in degrees
Z - Z coordinate value
LID - Coordinate system used to define coordinates of node (2)
DID - Coordinate system used to define displacements (2)
SPC - Single point constraints (packed number composed of digits 0, 1, 2 and/or 3)

Example

```
NODE 101  1.29  .1355  .0000  2  2  23
```

Comments

This data card set consists of NN cards.

The NODE cards used in the initial BOPACE run for the series of runs which calculated the cycles used for this extrapolation may be input here. Note that the cards are in fixed field format.

The cards must be in the same order as they were input to BOPACE.

Although only the coordinate data are used in the extrapolation, the remainder of the card is read and punched on the extrapolated nodal coordinate cards.

Card 7 - Title Card for Computed Nodal Displacements

List: Title

Format (80A1)

Description

Title - Any Hollerith characters

Example

OFHC/EFCU COMPUTED CYCLE 108 DISPLACEMENTS

Comments

Provides a title for the nodal displacements input for a cycle to be used in the extrapolation.

Cards 7A - Nodal Displacements

List: NODEID U V W

Format ('DISP',4X,I4,3X, 3E15.0)

Description

NODEID - Node identification number

U - Displacement in the R direction

V - Displacement in the θ direction

W - Displacement in the z direction

Example

```
DISP  101  .52456134-04  .23876139-06  .0
```

Comments

This data card set consists of NN cards.

The cards must be in the same order as the NODE cards for the base configuration.

The NODEID field is for user reference only and is not used by the code.

The input data group consisting of Card 7 and Cards 7A is repeated for each cycle to be used in the extrapolation for a total of NC groups.

These groups must be input in the same order as the cycles are specified on Card 3.

The displacement cards may be punched from a BOPACE restart tape by executing the restart tape reader program described in Section 5.

4. PLOTTING PROGRAM

4.1 DESCRIPTION OF PROGRAM CAPABILITIES

The plotting program is capable of plotting 2D or 3D BOPACE models of cylindrical thrust chambers. Input to the program consists of BOPACE element definition cards (QUAD or BRICK), NODE cards for each cycle to be plotted (computed or extrapolated) plus data cards containing title and control information.

Related views are available for plotting 3D models, or to change the orientation of a 2D plot on the plot frame. A node numbering option is available for labeling the nodes with the BOPACE internal sequence numbers.

Multiple cycles may be plotted in one execution by stacking the NODE cards for each configuration along with the corresponding title cards for plot labelling. Any mixture of base configurations, computed cycles, and or extrapolated cycles may be included in one run.

Partial structure plots, e.g., cuts or slices through a 3D model, may be generated by inputting only those element definition cards contained in the slice.

An example of a 2-D thrust chamber plot with the node numbering option activated and the standard or default orientation is shown in Fig. 1.

A plot of the same model without node numbers and a view angle rotated 90 deg about axis-3 (Z axis) is shown in Fig. 2.

4.2 USER'S GUIDE

All input data to the plotting program is "fixed field," i.e., all data items must be punched in the prescribed card columns as defined below. The NODE cards and BRICK/QUAD cards punched in this manner are compatible with BOPACE.

Card 1 - Title Card

List: Title

Format (40A1)

Description

Title - Any Hollerith characters

Example

OFHC/EFCU THRUST CHAMBER

Comments

Provides a title which will appear at the top of each plotted frame. Note that only 40 columns are permitted.

Card 2 - Plotting Control Card

List: NN NC NFLG KVIEW IANG IAXIS JANG JAXIS
Format (8I5)

Description

NN - Number of nodes (NN $\leq$ 200)

NC - Number of cycles to be plotted (NC $\leq$ 6)

NFLG - Node numbering flag

NFLG = 1 nodes are numbered on plot
NFLG = 0 nodes are not numbered

KVIEW - The view axis which is normal to the plotted frame (Default KVIEW = 3)

IANG - Rotation in degrees about IAXIS for plotting

IAXIS - Axis about which first rotation is performed

JANG - Rotation in degrees about JAXIS for plotting

JAXIS - Axis about which second rotation is performed.

Example

100 5 0 3 90 3 0 0

Comments

This card is used to define the number of nodes, number of cycles, node numbering option as well as the view angle and orientation for the plots. The default view angle is axis-3 (z-axis) normal to the plotting frame, directed positive outward. The default orientation prescribes the $\theta = 0$ R axis to lie horizontally, positive direction to the right. If this view angle and orientation is satisfactory, fields 4 through 8 on this card may be omitted. Otherwise any view axis may be selected to be normal to the plotted surface, plus, up to two rotations about selected axes may be prescribed.

Card 3 - Element Definition Cards – QUAD

List: QUAD eid mid pid rid n_1 n_2 n_3 n_4 n_e

Format ('QUAD', 2X, 8I6, 24X, I2)

List: CONT n_5 $n_6 \ldots n_\ell$

Format ('CONT', 2X, 12I6)

Description

All fields are same as described in BOPACE manual.

Example

```
QUAD  1  1  1  2  1  3  17  15
CONT  101  2  102  0  11  0  0  16  0  0  10  0
```

Comments

BOPACE element definition QUAD cards may be used as input, but data must be punched according to the above prescribed fixed format in fields of 6 columns.

The n_e parameter must be punched in column 79 or 80.

If $n_e > 0$, a CONT card must be used to input the intermediate nodes as illustrated by the example.

Cards 3 (Continued) - Element Definition Cards - BRICK

List: BRICK eid mid pid rid n_1 n_2 n_3 n_4 n_5 n_6 n_7 n_8 n_e

Format ('BRICK_', 12I6, I2)

List: CONT n_9 ... n_{20}

CONT n_{21} ... n_{32}

CONT n_{33} ... n_{44}

Format ('CONT', 2X, 12I6)

Description

All fields are same as described in BOPACE manual.

Example

```
BRICK  6  1  1  2  6  7  8  9  26  27  28  29  2
CONT   0  0  0  0  0  0  50  51  0  0  0  0
CONT   0  0  250  251  0  0  0  0  0  0  0  0
```

Comments

As with the QUAD cards, BOPACE BRICK cards may be used as input if the data is punched in fields of 6 columns as described in the above formats.

The n_e parameter must be punched in Column 79 or 80.

If $n_e > 0$, n_e CONT cards must be used to input the intermediate nodes, as illustrated by the example.

Card 4 - END Card

List: END
Format ('END')

Description

END card signals the end of element data.

Example

END

Comments

Element definition cards (QUAD or BRICK) along with any necessary CONT cards are read until an END card is encountered, signaling the end of the element definition data.

Card 5 - Cycle Title Card

List: TITLE
Format (40A1)

Description

TITLE - Any Hollerith characters

Example

EXTRAPOLATED CYCLE 150

Comments

Provides a title for the nodal coordinate data which follows as the next input item.

This title will appear at the bottom of the plot frame containing this cycle nodal coordinate data.

Note that a maximum of 40 columns are permitted.

Cards 5A - Cycle Nodal Coordinates

List: NODEID R THETA Z LID DID SPC
Format ('NODE', 4X, I4, 12X, 3F8.0, 3I8)

Description

NODEID - Node identification number.

R - R coordinate value.

THETA - Theta coordinate value defined in degrees.

Z - Z coordinate value.

LID - Coordinate system used to define coordinates of node (2).

DID - Coordinate system used to define displacements of node (2).

SPC - Single point constraints (packed number composed of digits 0, 1, 2 and/or 3).

Example

```
NODE 101  1.2932  .1357  .0000  2  2  23
```

Comments

This data card set consists of NN cards.

These NODE cards describing a configuration to be plotted, may represent a base configuration, a computed cycle, or an extrapolated cycle.

A total of NC sets of Cards 5 and 5A are input for a single plot run.

Any combination of base configurations, computed cycles, and/or extrapolated cycles may be plotted. It is important to input an appropriate title card for each configuration for proper labeling on the plots.

5. RESTART TAPE READER PROGRAM

The restart tape reader program is a reduced version of BOPACE containing only the routines needed to process a restart tape. Code has been added to punch the nodal displacements for a specified increment in the format required by the extrapolation program.

The data input consists of three BOPACE data cards: TITLE, RESTART, and EOF. These cards are described in the BOPACE User Manual (Ref. 3). The nodal displacements are punched for the increment specified on the RESTART card.

Example

```
TITLE  OFHC/EFCU  CYCLE 108
REST   161  1  28
EOF
```

6. REFERENCES

1. Armstrong, W.H., "Structural Analysis of Cylindrical Thrust Chambers, Vol. 2," NASA CR-165241, Contract NAS3-21953, NASA-Lewis Research Center, Cleveland, Ohio, November 1980.

2. Armstrong, W.H., "Structural Analysis of Cylindrical Thrust Chambers, Vol. 1," NASA CR-159522, Contract NAS3-21361, NASA-Lewis Research Center, Cleveland, Ohio, March 1979.

3. Vos, R.G., "The Boeing Plastic Analysis Capability for Engines (BOPACE)," Boeing Document D180-20229, Contract NAS8-30615, NASA-George C. Marshall Space Flight Center, Huntsville, Ala., December 1976.

7. EXAMPLE PROBLEM

An example problem is included consisting of an OFHC Cylinder 34 Thrust Chamber. Included in the example are:

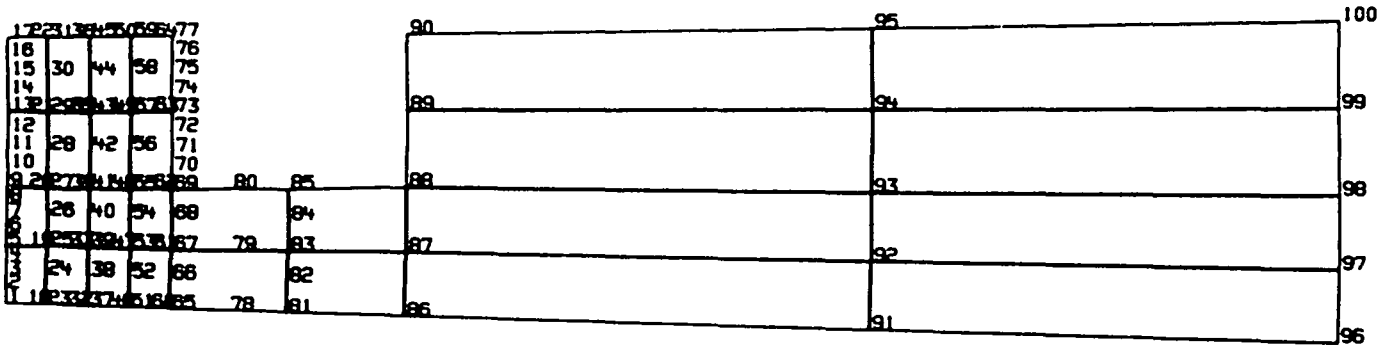
- An extrapolation run printout, including a listing of the input data
- Two plotter input data listings
- Input data listings for extracting displacements via the restart tape reader program for use by the extrapolation program.

The extrapolation input data consist of a title card, control information, NODE cards specifying the base configuration, and DISP cards specifying the displacements for the computed cycles used for the extrapolation. The case described contains 100 nodes. Three cycles are used to perform the extrapolation, cycles 103, 104 and 105. Six cycles are provided by the extrapolation, cycle 105, to provide a basis for an error check, and cycles 110, 120, 130, 140 and 150. Extrapolation is performed in the R coordinate direction only in this example.

The output consists of an echo of the input data plus the extrapolated nodal coordinate values for the extrapolated cycles. An error check is included for cycle 105.

The first plotter data case is set up to plot the undeformed structure with node numbers. The second plotter data case is configured to plot the computed cycle 105 and the extrapolated cycles 110, 120, 130, 140 and 150. These plots are made with a rotation of 90 degrees about the Z coordinate axis with no node numbers. Examples of the plots are given in Figs. 1 and 2.

Example data inputs are included for extracting computed nodal displacements for cycles 103, 104 and 105 from BOPACE restart tapes using the restart tape reader program.



NFLG = 1

KVIEW = IANG = IAXIS = JANG = JAXIS = 0

Fig. 1 - Plot Example with Node Numbering

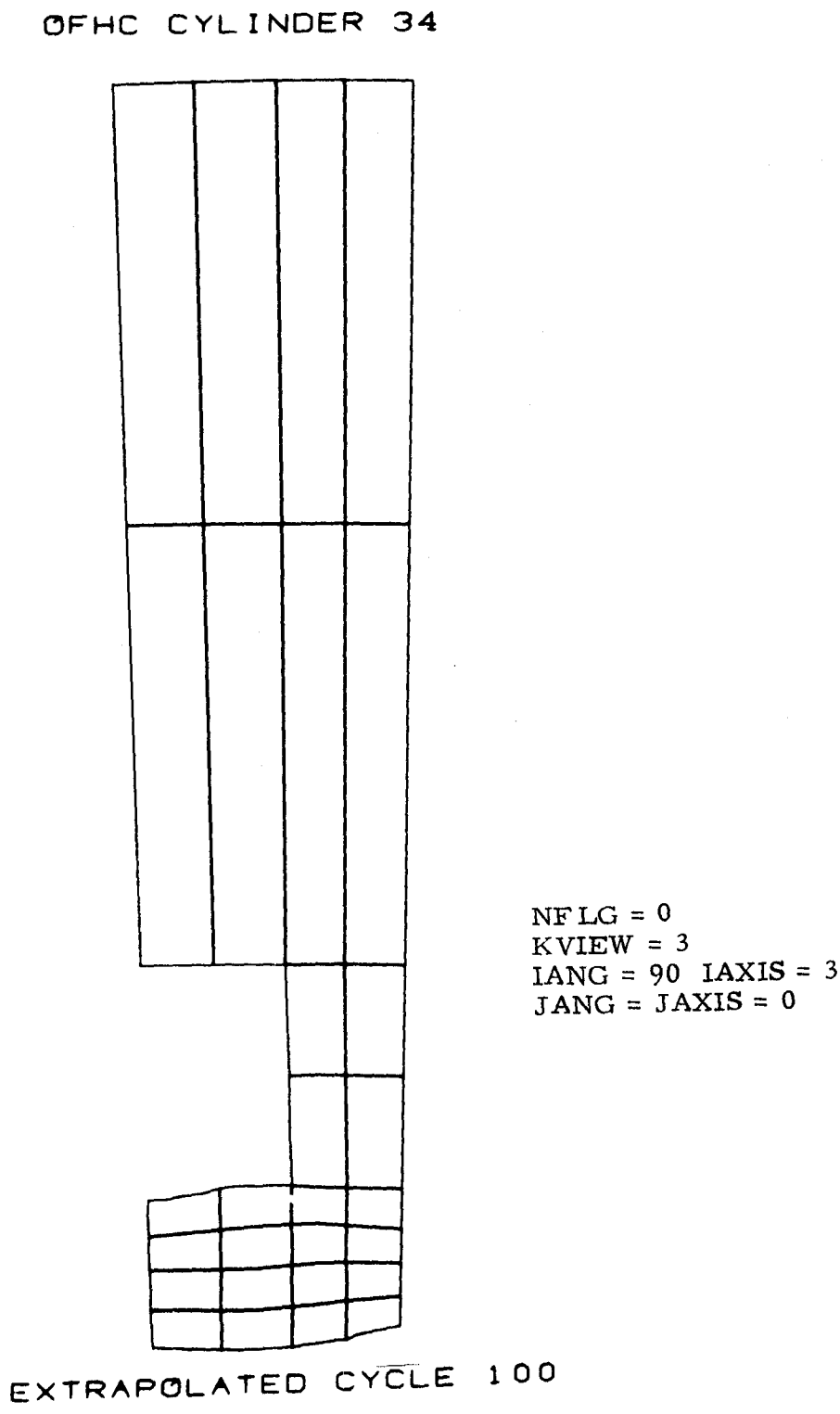


Fig. 2 - Plot Example with Rotated View Angle

```
@ELT,DIL DATA/EXTRAP
ELT BRI S7401C 11/25/80 20:17:59 (->01)
     1.          00      OFHC CYLINDER 34 THRUST CHAMBER
     2.          00        100    3    6
     3.          00        103  104  105
     4.          00        105  110  120  130  140  150
     5.          00      100
     6.          00      OFHC CYLINDER 34 CYCLE 100 BASE CONFIGURATION
     7.          00      NODE    1                1.29211   .0000    .0000    2    2    2
     8.          00      NODE    101              1.29162   .1355    .0000    2    2
     9.          00      NODE    2                1.29087   .2710    .0000    2    2
    10.          00      NODE    102              1.29012   .4065    .0000    2    2
    11.          00      NODE    3                1.28919   .5420    .0000    2    2
    12.          00      NODE    103              1.28861   .6775    .0000    2    2
    13.          00      NODE    4                1.28819   .8130    .0000    2    2
    14.          00      NODE    104              1.28773   .9485    .0000    2    2
    15.          00      NODE    5                1.28735  1.0840    .0000    2    2
    16.          00      NODE    105              1.28697  1.2610    .0000    2    2
    17.          00      NODE    6                1.28681  1.4380    .0000    2    2
    18.          00      NODE    106              1.28667  1.6150    .0000    2    2
    19.          00      NODE    7                1.28675  1.7920    .0000    2    2
    20.          00      NODE    107              1.28694  1.9690    .0000    2    2
    21.          00      NODE    8                1.28704  2.1460    .0000    2    2
    22.          00      NODE    108              1.28718  2.3230    .0000    2    2
    23.          00      NODE    9                1.28724  2.5000    .0000    2    2    2
    24.          00      NODE    10               1.29554   .0000    .0000    2    2    2
    25.          00      NODE    11               1.29346   .5420    .0000    2    2
    26.          00      NODE    12               1.29175  1.0840    .0000    2    2
    27.          00      NODE    13               1.29108  1.7920    .0000    2    2
    28.          00      NODE    14               1.29164  2.5000    .0000    2    2    2
    29.          00      NODE    15               1.29901   .0000    .0000    2    2    2
    30.          00      NODE    16               1.29854   .2710    .0000    2    2
    31.          00      NODE    17               1.29770   .5420    .0000    2    2
    32.          00      NODE    18               1.29689   .8130    .0000    2    2
    33.          00      NODE    19               1.29619  1.0840    .0000    2    2
    34.          00      NODE    20               1.29566  1.4380    .0000    2    2
    35.          00      NODE    21               1.29549  1.7920    .0000    2    2
    36.          00      NODE    22               1.29573  2.1460    .0000    2    2
    37.          00      NODE    23               1.29595  2.5000    .0000    2    2    2
    38.          00      NODE    24               1.30273   .0000    .0000    2    2    2
    39.          00      NODE    25               1.30217   .5420    .0000    2    2
    40.          00      NODE    26               1.30092  1.0840    .0000    2    2
    41.          00      NODE    27               1.30016  1.7920    .0000    2    2
    42.          00      NODE    28               1.30043  2.5000    .0000    2    2    2
    43.          00      NODE    29               1.30643   .0000    .0000    2    2    2
    44.          00      NODE    30               1.30661   .2710    .0000    2    2
    45.          00      NODE    31               1.30667   .5420    .0000    2    2
    46.          00      NODE    32               1.30622   .8130    .0000    2    2
    47.          00      NODE    33               1.30572  1.0840    .0000    2    2
    48.          00      NODE    34               1.30513  1.4380    .0000    2    2
    49.          00      NODE    35               1.30481  1.7920    .0000    2    2
    50.          00      NODE    36               1.30479  2.1460    .0000    2    2
    51.          00      NODE    37               1.30481  2.5000    .0000    2    2    2
    52.          00      NODE    38               1.31021   .0000    .0000    2    2    2
    53.          00      NODE    39               1.31095   .5420    .0000    2    2
    54.          00      NODE    40               1.31038  1.0840    .0000    2    2
    55.          00      NODE    41               1.30935  1.7920    .0000    2    2
```

56.	00	NODE	42	1.30891	2.5000	.0000	2	2	2
57.	00	NODE	43	1.31438	.0000	.0000	2	2	2
58.	00	NODE	44	1.31469	.2710	.0000	2	2	
59.	00	NODE	45	1.31505	.5420	.0000	2	2	
60.	00	NODE	46	1.31527	.8130	.0000	2	2	
61.	00	NODE	47	1.31501	1.0840	.0000	2	2	
62.	00	NODE	48	1.31457	1.4380	.0000	2	2	
63.	00	NODE	49	1.31401	1.7920	.0000	2	2	
64.	00	NODE	50	1.31328	2.1460	.0000	2	2	
65.	00	NODE	51	1.31271	2.5000	.0000	2	2	2
66.	00	NODE	52	1.31882	.0000	.0000	2	2	2
67.	00	NODE	53	1.31922	.5420	.0000	2	2	
68.	00	NODE	54	1.31959	1.0840	.0000	2	2	
69.	00	NODE	55	1.31871	1.7920	.0000	2	2	
70.	00	NODE	56	1.31657	2.5000	.0000	2	2	2
71.	00	NODE	57	1.32330	.0000	.0000	2	2	2
72.	00	NODE	58	1.32336	.2710	.0000	2	2	
73.	00	NODE	59	1.32356	.5420	.0000	2	2	
74.	00	NODE	60	1.32360	.8130	.0000	2	2	
75.	00	NODE	61	1.32396	1.0840	.0000	2	2	
76.	00	NODE	505	1.32404	1.2610	.0000	2	2	
77.	00	NODE	62	1.32383	1.4380	.0000	2	2	
78.	00	NODE	506	1.32378	1.6150	.0000	2	2	
79.	00	NODE	63	1.32324	1.7920	.0000	2	2	
80.	00	NODE	507	1.32229	1.9690	.0000	2	2	
81.	00	NODE	64	1.32174	2.1460	.0000	2	2	
82.	00	NODE	508	1.32106	2.3230	.0000	2	2	
83.	00	NODE	65	1.32073	2.5000	.0000	2	2	2
84.	00	NODE	66	1.33606	.0000	.0000	2	2	2
85.	00	NODE	67	1.33618	.5485	.0000	2	2	
86.	00	NODE	68	1.33629	1.0968	.0000	2	2	
87.	00	NODE	69	1.34874	.0000	.0000	2	2	2
88.	00	NODE	70	1.34875	.2775	.0000	2	2	
89.	00	NODE	71	1.34877	.5550	.0000	2	2	
90.	00	NODE	72	1.34881	.8322	.0000	2	2	
91.	00	NODE	73	1.34877	1.1095	.0000	2	2	
92.	00	NODE	74	1.37372	.0000	.0000	2	2	2
93.	00	NODE	75	1.37372	.5680	.0000	2	2	
94.	00	NODE	76	1.37373	1.1350	.0000	2	2	
95.	00	NODE	77	1.37377	1.8180	.0000	2	2	
96.	00	NODE	78	1.37377	2.5000	.0000	2	2	2
97.	00	NODE	79	1.47352	.0000	.0000	2	2	2
98.	00	NODE	80	1.47354	.5680	.0000	2	2	
99.	00	NODE	81	1.47358	1.1350	.0000	2	2	
100.	00	NODE	82	1.47362	1.8180	.0000	2	2	
101.	00	NODE	83	1.47364	2.5000	.0000	2	2	2
102.	00	NODE	84	1.57376	.0000	.0000	2	2	2
103.	00	NODE	85	1.57375	.5680	.0000	2	2	
104.	00	NODE	86	1.57369	1.1350	.0000	2	2	
105.	00	NODE	87	1.57361	1.8180	.0000	2	2	
106.	00	NODE	88	1.57358	2.5000	.0000	2	2	2
107.	00	OFHC CYLINDER 34 COMPUTED CYCLE 103 DISPLACEMENTS							
108.	00	DISP	1	3.7476115E-05	0.0	0.0			
109.	00	DISP	101	-3.7949603E-06	0.0	0.0			
110.	00	DISP	2	-5.8361271E-05	0.0	0.0			
111.	00	DISP	102	-1.0029995E-04	0.0	0.0			
112.	00	DISP	3	-1.4055590E-04	0.0	0.0			

113.	00	DISP	103	-1.4946920E-04	0.0	0.0
114.	00	DISP	4	-1.5742247E-04	0.0	0.0
115.	00	DISP	104	-1.7747474E-04	0.0	0.0
116.	00	DISP	5	-1.8890105E-04	0.0	0.0
117.	00	DISP	105	-2.0262928E-04	0.0	0.0
118.	00	DISP	6	-2.1570038E-04	0.0	0.0
119.	00	DISP	106	-2.2380486E-04	0.0	0.0
120.	00	DISP	7	-2.3170449E-04	0.0	0.0
121.	00	DISP	107	-2.3619988E-04	0.0	0.0
122.	00	DISP	8	-2.3774184E-04	0.0	0.0
123.	00	DISP	108	-2.3336764E-04	0.0	0.0
124.	00	DISP	9	-2.2803729E-04	0.0	0.0
125.	00	DISP	10	-2.6585738E-05	0.0	0.0
126.	00	DISP	11	-9.7779121E-05	0.0	0.0
127.	00	DISP	12	-1.8248246E-04	0.0	0.0
128.	00	DISP	13	-2.3589333E-04	0.0	0.0
129.	00	DISP	14	-2.3780811E-04	0.0	0.0
130.	00	DISP	15	-5.5540542E-05	0.0	0.0
131.	00	DISP	16	-7.5667864E-05	0.0	0.0
132.	00	DISP	17	-7.9757039E-05	0.0	0.0
133.	00	DISP	18	-1.1539945E-04	0.0	0.0
134.	00	DISP	19	-1.6424572E-04	0.0	0.0
135.	00	DISP	20	-2.0718720E-04	0.0	0.0
136.	00	DISP	21	-2.3933570E-04	0.0	0.0
137.	00	DISP	22	-2.5322940E-04	0.0	0.0
138.	00	DISP	23	-2.4900050E-04	0.0	0.0
139.	00	DISP	24	-6.6776294E-05	0.0	0.0
140.	00	DISP	25	-7.8240017E-05	0.0	0.0
141.	00	DISP	26	-1.4485026E-04	0.0	0.0
142.	00	DISP	27	-2.4438254E-04	0.0	0.0
143.	00	DISP	28	-2.6439945E-04	0.0	0.0
144.	00	DISP	29	-7.3597621E-05	0.0	0.0
145.	00	DISP	30	-6.8204376E-05	0.0	0.0
146.	00	DISP	31	-7.0440001E-05	0.0	0.0
147.	00	DISP	32	-9.8441509E-05	0.0	0.0
148.	00	DISP	33	-1.3411495E-04	0.0	0.0
149.	00	DISP	34	-1.9125637E-04	0.0	0.0
150.	00	DISP	35	-2.4966360E-04	0.0	0.0
151.	00	DISP	36	-2.7121208E-04	0.0	0.0
152.	00	DISP	37	-2.7913158E-04	0.0	0.0
153.	00	DISP	38	-7.1518793E-05	0.0	0.0
154.	00	DISP	39	-6.0330538E-05	0.0	0.0
155.	00	DISP	40	-1.2296885E-04	0.0	0.0
156.	00	DISP	41	-2.5397516E-04	0.0	0.0
157.	00	DISP	42	-2.9458408E-04	0.0	0.0
158.	00	DISP	43	-6.1171522E-05	0.0	0.0
159.	00	DISP	44	-5.5287324E-05	0.0	0.0
160.	00	DISP	45	-5.5678451E-05	0.0	0.0
161.	00	DISP	46	-7.1002461E-05	0.0	0.0
162.	00	DISP	47	-1.0679517E-04	0.0	0.0
163.	00	DISP	48	-2.0256350E-04	0.0	0.0
164.	00	DISP	49	-2.6017427E-04	0.0	0.0
165.	00	DISP	50	-2.8703222E-04	0.0	0.0
166.	00	DISP	51	-3.1214627E-04	0.0	0.0
167.	00	DISP	52	-4.8088827E-05	0.0	0.0
168.	00	DISP	53	-5.2087998E-05	0.0	0.0
169.	00	DISP	54	-8.8084038E-05	0.0	0.0

170.	00	DISP	55	-2.5854073E-04	0.0	0.0
171.	00	DISP	56	-3.3932948E-04	0.0	0.0
172.	00	DISP	57	-3.8831960E-05	0.0	0.0
173.	00	DISP	58	-3.6427591E-05	0.0	0.0
174.	00	DISP	59	-4.5728346E-05	0.0	0.0
175.	00	DISP	60	-5.8628068E-05	0.0	0.0
176.	00	DISP	61	-7.7890232E-05	0.0	0.0
177.	00	DISP	505	-1.4807821E-04	0.0	0.0
178.	00	DISP	62	-1.8996501E-04	0.0	0.0
179.	00	DISP	506	-2.2773044E-04	0.0	0.0
180.	00	DISP	63	-2.4684262E-04	0.0	0.0
181.	00	DISP	507	-2.8418656E-04	0.0	0.0
182.	00	DISP	64	-3.1736540E-04	0.0	0.0
183.	00	DISP	508	-3.5292259E-04	0.0	0.0
184.	00	DISP	65	-3.8290094E-04	0.0	0.0
185.	00	DISP	66	-1.5652608E-05	0.0	0.0
186.	00	DISP	67	-1.9475119E-05	0.0	0.0
187.	00	DISP	68	-4.5611654E-05	0.0	0.0
188.	00	DISP	69	-6.5800987E-06	0.0	0.0
189.	00	DISP	70	-8.5069069E-06	0.0	0.0
190.	00	DISP	71	-6.1779920E-06	0.0	0.0
191.	00	DISP	72	-8.5803867E-06	0.0	0.0
192.	00	DISP	73	-1.7994287E-05	0.0	0.0
193.	00	DISP	74	-1.6804144E-05	0.0	0.0
194.	00	DISP	75	-1.6082791E-05	0.0	0.0
195.	00	DISP	76	-1.4003383E-05	0.0	0.0
196.	00	DISP	77	-1.0870307E-05	0.0	0.0
197.	00	DISP	78	-9.9405952E-06	0.0	0.0
198.	00	DISP	79	-1.2707024E-05	0.0	0.0
199.	00	DISP	80	-1.2152830E-05	0.0	0.0
200.	00	DISP	81	-1.0625276E-05	0.0	0.0
201.	00	DISP	82	-9.2355276E-06	0.0	0.0
202.	00	DISP	83	-8.3033146E-06	0.0	0.0
203.	00	DISP	84	1.9710460E-06	0.0	0.0
204.	00	DISP	85	1.3936369E-06	0.0	0.0
205.	00	DISP	86	-9.3927326E-08	0.0	0.0
206.	00	DISP	87	-2.1765100E-06	0.0	0.0
207.	00	DISP	88	-3.2590515E-06	0.0	0.0
208.	00	OFHC CYLINDER 34 COMPUTED CYCLE 104 DISPLACEMENTS				
209.	00	DISP	1	5.2454794E-05	0.0	0.0
210.	00	DISP	101	-1.0551387E-05	0.0	0.0
211.	00	DISP	2	-8.8745379E-05	0.0	0.0
212.	00	DISP	102	-1.5058008E-04	0.0	0.0
213.	00	DISP	3	-2.0848626E-04	0.0	0.0
214.	00	DISP	103	-2.1876342E-04	0.0	0.0
215.	00	DISP	4	-2.2687243E-04	0.0	0.0
216.	00	DISP	104	-2.5058771E-04	0.0	0.0
217.	00	DISP	5	-2.6261527E-04	0.0	0.0
218.	00	DISP	105	-2.7670851E-04	0.0	0.0
219.	00	DISP	6	-2.8948137E-04	0.0	0.0
220.	00	DISP	106	-2.9612286E-04	0.0	0.0
221.	00	DISP	7	-3.0136900E-04	0.0	0.0
222.	00	DISP	107	-3.0077086E-04	0.0	0.0
223.	00	DISP	8	-2.9796478E-04	0.0	0.0
224.	00	DISP	108	-2.8835773E-04	0.0	0.0
225.	00	DISP	9	-2.7951295E-04	0.0	0.0
226.	00	DISP	10	-4.7175447E-05	0.0	0.0

227.	00	DISP	11	-1.5022868E-04	0.0	0.0
228.	00	DISP	12	-2.5298004E-04	0.0	0.0
229.	00	DISP	13	-3.0470290E-04	0.0	0.0
230.	00	DISP	14	-2.8779055E-04	0.0	0.0
231.	00	DISP	15	-9.5250623E-05	0.0	0.0
232.	00	DISP	16	-1.2354326E-04	0.0	0.0
233.	00	DISP	17	-1.2680987E-04	0.0	0.0
234.	00	DISP	18	-1.7001944E-04	0.0	0.0
235.	00	DISP	19	-2.2752756E-04	0.0	0.0
236.	00	DISP	20	-2.7405401E-04	0.0	0.0
237.	00	DISP	21	-3.0628568E-04	0.0	0.0
238.	00	DISP	22	-3.1278655E-04	0.0	0.0
239.	00	DISP	23	-3.0055456E-04	0.0	0.0
240.	00	DISP	24	-1.1721461E-04	0.0	0.0
241.	00	DISP	25	-1.2734550E-04	0.0	0.0
242.	00	DISP	26	-2.0110117E-04	0.0	0.0
243.	00	DISP	27	-3.0904333E-04	0.0	0.0
244.	00	DISP	28	-3.2003666E-04	0.0	0.0
245.	00	DISP	29	-1.3300615E-04	0.0	0.0
246.	00	DISP	30	-1.2261278E-04	0.0	0.0
247.	00	DISP	31	-1.1945740E-04	0.0	0.0
248.	00	DISP	32	-1.4962799E-04	0.0	0.0
249.	00	DISP	33	-1.8769350E-04	0.0	0.0
250.	00	DISP	34	-2.4880958E-04	0.0	0.0
251.	00	DISP	35	-3.1132624E-04	0.0	0.0
252.	00	DISP	36	-3.3153337E-04	0.0	0.0
253.	00	DISP	37	-3.3868128E-04	0.0	0.0
254.	00	DISP	38	-1.3578424E-04	0.0	0.0
255.	00	DISP	39	-1.0936517E-04	0.0	0.0
256.	00	DISP	40	-1.7514019E-04	0.0	0.0
257.	00	DISP	41	-3.1320378E-04	0.0	0.0
258.	00	DISP	42	-3.5853055E-04	0.0	0.0
259.	00	DISP	43	-1.2567174E-04	0.0	0.0
260.	00	DISP	44	-1.1399663E-04	0.0	0.0
261.	00	DISP	45	-1.0804545E-04	0.0	0.0
262.	00	DISP	46	-1.1956705E-04	0.0	0.0
263.	00	DISP	47	-1.5546908E-04	0.0	0.0
264.	00	DISP	48	-2.5711278E-04	0.0	0.0
265.	00	DISP	49	-3.1781057E-04	0.0	0.0
266.	00	DISP	50	-3.4536282E-04	0.0	0.0
267.	00	DISP	51	-3.8035889E-04	0.0	0.0
268.	00	DISP	52	-1.0972186E-04	0.0	0.0
269.	00	DISP	53	-1.0761476E-04	0.0	0.0
270.	00	DISP	54	-1.3368264E-04	0.0	0.0
271.	00	DISP	55	-3.1118817E-04	0.0	0.0
272.	00	DISP	56	-4.1484227E-04	0.0	0.0
273.	00	DISP	57	-9.8225719E-05	0.0	0.0
274.	00	DISP	58	-9.4514558E-05	0.0	0.0
275.	00	DISP	59	-1.0163350E-04	0.0	0.0
276.	00	DISP	60	-1.1116161E-04	0.0	0.0
277.	00	DISP	61	-1.2460700E-04	0.0	0.0
278.	00	DISP	505	-1.9365043E-04	0.0	0.0
279.	00	DISP	62	-2.3644103E-04	0.0	0.0
280.	00	DISP	506	-2.7239299E-04	0.0	0.0
281.	00	DISP	63	-2.8978032E-04	0.0	0.0
282.	00	DISP	507	-3.3527939E-04	0.0	0.0
283.	00	DISP	64	-3.7928880E-04	0.0	0.0

284.	00	DISP	508	-4.2879093E-04	0.0	0.0
285.	00	DISP	65	-4.7075564E-04	0.0	0.0
286.	00	DISP	66	-6.9868853E-05	0.0	0.0
287.	00	DISP	67	-7.2239258E-05	0.0	0.0
288.	00	DISP	68	-9.6968681E-05	0.0	0.0
289.	00	DISP	69	-5.7470650E-05	0.0	0.0
290.	00	DISP	70	-5.9626327E-05	0.0	0.0
291.	00	DISP	71	-5.6621197E-05	0.0	0.0
292.	00	DISP	72	-5.8846039E-05	0.0	0.0
293.	00	DISP	73	-6.9192538E-05	0.0	0.0
294.	00	DISP	74	-6.6925044E-05	0.0	0.0
295.	00	DISP	75	-6.6226072E-05	0.0	0.0
296.	00	DISP	76	-6.4123815E-05	0.0	0.0
297.	00	DISP	77	-6.0637482E-05	0.0	0.0
298.	00	DISP	78	-5.9639380E-05	0.0	0.0
299.	00	DISP	79	-6.1195795E-05	0.0	0.0
300.	00	DISP	80	-6.0537801E-05	0.0	0.0
301.	00	DISP	81	-5.8646649E-05	0.0	0.0
302.	00	DISP	82	-5.6864694E-05	0.0	0.0
303.	00	DISP	83	-5.5801400E-05	0.0	0.0
304.	00	DISP	84	-4.0893225E-05	0.0	0.0
305.	00	DISP	85	-4.1615538E-05	0.0	0.0
306.	00	DISP	86	-4.3587992E-05	0.0	0.0
307.	00	DISP	87	-4.6353161E-05	0.0	0.0
308.	00	DISP	88	-4.7735375E-05	0.0	0.0
309.	00	OFHC CYLINDER 34 COMPUTED CYCLE 105 DISPLACEMENTS				
310.	00	DISP	1	6.8108755E-05	0.0	0.0
311.	00	DISP	101	-1.7127837E-05	0.0	0.0
312.	00	DISP	2	-1.1834914E-04	0.0	0.0
313.	00	DISP	102	-2.0036826E-04	0.0	0.0
314.	00	DISP	3	-2.7648406E-04	0.0	0.0
315.	00	DISP	103	-2.8784992E-04	0.0	0.0
316.	00	DISP	4	-2.9557827E-04	0.0	0.0
317.	00	DISP	104	-3.2216567E-04	0.0	0.0
318.	00	DISP	5	-3.3424376E-04	0.0	0.0
319.	00	DISP	105	-3.4831930E-04	0.0	0.0
320.	00	DISP	6	-3.6026351E-04	0.0	0.0
321.	00	DISP	106	-3.6514504E-04	0.0	0.0
322.	00	DISP	7	-3.6728452E-04	0.0	0.0
323.	00	DISP	107	-3.6102557E-04	0.0	0.0
324.	00	DISP	8	-3.5349047E-04	0.0	0.0
325.	00	DISP	108	-3.3834414E-04	0.0	0.0
326.	00	DISP	9	-3.2587140E-04	0.0	0.0
327.	00	DISP	10	-6.7247616E-05	0.0	0.0
328.	00	DISP	11	-2.0301843E-04	0.0	0.0
329.	00	DISP	12	-3.2148161E-04	0.0	0.0
330.	00	DISP	13	-3.6984473E-04	0.0	0.0
331.	00	DISP	14	-3.3263839E-04	0.0	0.0
332.	00	DISP	15	-1.3484016E-04	0.0	0.0
333.	00	DISP	16	-1.7091418E-04	0.0	0.0
334.	00	DISP	17	-1.7405830E-04	0.0	0.0
335.	00	DISP	18	-2.2411777E-04	0.0	0.0
336.	00	DISP	19	-2.8923131E-04	0.0	0.0
337.	00	DISP	20	-3.3807475E-04	0.0	0.0
338.	00	DISP	21	-3.6951294E-04	0.0	0.0
339.	00	DISP	22	-3.6776601E-04	0.0	0.0
340.	00	DISP	23	-3.4712162E-04	0.0	0.0

341.	00	DISP	24	-1.6759882E-04	0.0	0.0
342.	00	DISP	25	-1.7607304E-04	0.0	0.0
343.	00	DISP	26	-2.5614654E-04	0.0	0.0
344.	00	DISP	27	-3.6975974E-04	0.0	0.0
345.	00	DISP	28	-3.7079770E-04	0.0	0.0
346.	00	DISP	29	-1.9227443E-04	0.0	0.0
347.	00	DISP	30	-1.7673560E-04	0.0	0.0
348.	00	DISP	31	-1.6783226E-04	0.0	0.0
349.	00	DISP	32	-2.0018080E-04	0.0	0.0
350.	00	DISP	33	-2.4025515E-04	0.0	0.0
351.	00	DISP	34	-3.0393177E-04	0.0	0.0
352.	00	DISP	35	-3.6884611E-04	0.0	0.0
353.	00	DISP	36	-3.8739201E-04	0.0	0.0
354.	00	DISP	37	-3.9339764E-04	0.0	0.0
355.	00	DISP	38	-2.0003514E-04	0.0	0.0
356.	00	DISP	39	-1.5790047E-04	0.0	0.0
357.	00	DISP	40	-2.2636967E-04	0.0	0.0
358.	00	DISP	41	-3.6841771E-04	0.0	0.0
359.	00	DISP	42	-4.1780248E-04	0.0	0.0
360.	00	DISP	43	-1.9046765E-04	0.0	0.0
361.	00	DISP	44	-1.7281508E-04	0.0	0.0
362.	00	DISP	45	-1.6008165E-04	0.0	0.0
363.	00	DISP	46	-1.6733709E-04	0.0	0.0
364.	00	DISP	47	-2.0299565E-04	0.0	0.0
365.	00	DISP	48	-3.0871551E-04	0.0	0.0
366.	00	DISP	49	-3.7176814E-04	0.0	0.0
367.	00	DISP	50	-3.9920025E-04	0.0	0.0
368.	00	DISP	51	-4.4391770E-04	0.0	0.0
369.	00	DISP	52	-1.7181977E-04	0.0	0.0
370.	00	DISP	53	-1.6288142E-04	0.0	0.0
371.	00	DISP	54	-1.7786355E-04	0.0	0.0
372.	00	DISP	55	-3.6028400E-04	0.0	0.0
373.	00	DISP	56	-4.8588100E-04	0.0	0.0
374.	00	DISP	57	-1.5805371E-04	0.0	0.0
375.	00	DISP	58	-1.5318563E-04	0.0	0.0
376.	00	DISP	59	-1.5734172E-04	0.0	0.0
377.	00	DISP	60	-1.6286304E-04	0.0	0.0
378.	00	DISP	61	-1.6990188E-04	0.0	0.0
379.	00	DISP	505	-2.3646046E-04	0.0	0.0
380.	00	DISP	62	-2.7959445E-04	0.0	0.0
381.	00	DISP	506	-3.1317631E-04	0.0	0.0
382.	00	DISP	63	-3.2891333E-04	0.0	0.0
383.	00	DISP	507	-3.8224738E-04	0.0	0.0
384.	00	DISP	64	-4.3692789E-04	0.0	0.0
385.	00	DISP	508	-5.0043338E-04	0.0	0.0
386.	00	DISP	65	-5.6082918E-04	0.0	0.0
387.	00	DISP	66	-1.2500327E-04	0.0	0.0
388.	00	DISP	67	-1.2570016E-04	0.0	0.0
389.	00	DISP	68	-1.4798276E-04	0.0	0.0
390.	00	DISP	69	-1.0975545E-04	0.0	0.0
391.	00	DISP	70	-1.1193079E-04	0.0	0.0
392.	00	DISP	71	-1.0839247E-04	0.0	0.0
393.	00	DISP	72	-1.1036028E-04	0.0	0.0
394.	00	DISP	73	-1.2112624E-04	0.0	0.0
395.	00	DISP	74	-1.1817833E-04	0.0	0.0
396.	00	DISP	75	-1.1750958E-04	0.0	0.0
397.	00	DISP	76	-1.1537284E-04	0.0	0.0

398.	00	DISP	77	-1.1169347E-04	0.0	0.0
399.	00	DISP	78	-1.1061643E-04	0.0	0.0
4C0.	00	DISP	79	-1.1075022E-04	0.0	0.0
4C1.	00	DISP	80	-1.0999663E-04	0.0	0.0
4C2.	00	DISP	81	-1.0779203E-04	0.0	0.0
4C3.	00	DISP	82	-1.0563763E-04	0.0	0.0
4C4.	00	DISP	83	-1.0444703E-04	0.0	0.0
4C5.	00	DISP	84	-8.4881904E-05	0.0	0.0
4C6.	00	DISP	85	-8.5739099E-05	0.0	0.0
4C7.	00	DISP	86	-8.8153218E-05	0.0	0.0
4C8.	00	DISP	87	-9.1591370E-05	0.0	0.0
409.	00	DISP	88	-9.3284762E-05	0.0	0.0

END ELT. ERRORS: NONE. TIME: 2.780 SEC. IMAGE COUNT: 409

@XCT ABS

```
CFHC CYLINDER 34 THRUST CHAMBER

NUMBER OF NODES =  100
NUMBER OF CYCLES FOR CURVE FIT =     3
NUMBER OF EXTRAPOLATED CYCLES  =     6

LIST OF CYCLES FOR CURVE FIT   103  104  105

LIST OF EXTRAPOLATED CYCLES    105  110  120  130  140  150

EXTRAPOLATION PERFORMED FOR
R       COORDINATE DIRECTION
```

OFHC CYLINDER 34 CYCLE 100 BASE CONFIGURATION

		R	THETA	Z			
NODE	1	1.29211	.00000	.00000	2	2	2
NODE	101	1.29162	.13550	.00000	2	2	
NODE	2	1.29087	.27100	.00000	2	2	
NODE	102	1.29012	.40650	.00000	2	2	
NODE	3	1.28919	.54200	.00000	2	2	
NODE	103	1.28861	.67750	.00000	2	2	
NODE	4	1.28819	.81300	.00000	2	2	
NODE	104	1.28773	.94850	.00000	2	2	
NODE	5	1.28735	1.08400	.00000	2	2	
NODE	105	1.28697	1.21950	.00000	2	2	
NODE	6	1.28681	1.35500	.00000	2	2	
NODE	106	1.28667	1.49050	.00000	2	2	
NODE	7	1.28675	1.62600	.00000	2	2	
NODE	107	1.28694	1.76150	.00000	2	2	
NODE	8	1.28704	1.89700	.00000	2	2	
NODE	108	1.28718	2.03250	.00000	2	2	
NODE	9	1.28724	2.16800	.00000	2	2	2
NODE	10	1.29554	.00000	.00000	2	2	2
NODE	11	1.29346	.54200	.00000	2	2	
NODE	12	1.29175	1.08400	.00000	2	2	
NODE	13	1.29108	1.62600	.00000	2	2	
NODE	14	1.29164	2.16800	.00000	2	2	2
NODE	15	1.29901	.00000	.00000	2	2	2
NODE	16	1.29854	.27100	.00000	2	2	
NODE	17	1.29770	.54200	.00000	2	2	
NODE	18	1.29689	.81300	.00000	2	2	
NODE	19	1.29619	1.08400	.00000	2	2	
NODE	20	1.29566	1.43800	.00000	2	2	
NODE	21	1.29549	1.79200	.00000	2	2	
NODE	22	1.29573	2.14600	.00000	2	2	
NODE	23	1.29595	2.50000	.00000	2	2	2
NODE	24	1.30273	.00000	.00000	2	2	2
NODE	25	1.30217	.54200	.00000	2	2	
NODE	26	1.30092	1.08400	.00000	2	2	
NODE	27	1.30016	1.79200	.00000	2	2	
NODE	28	1.30043	2.50000	.00000	2	2	2
NODE	29	1.30643	.00000	.00000	2	2	2
NODE	30	1.30661	.27100	.00000	2	2	
NODE	31	1.30667	.54200	.00000	2	2	
NODE	32	1.30622	.81300	.00000	2	2	
NODE	33	1.30572	1.08400	.00000	2	2	
NODE	34	1.30513	1.43800	.00000	2	2	
NODE	35	1.30481	1.79200	.00000	2	2	
NODE	36	1.30479	2.14600	.00000	2	2	
NODE	37	1.30481	2.50000	.00000	2	2	2
NODE	38	1.31021	.00000	.00000	2	2	2
NODE	39	1.31095	.54200	.00000	2	2	
NODE	40	1.31038	1.08400	.00000	2	2	
NODE	41	1.30935	1.79200	.00000	2	2	
NODE	42	1.30891	2.50000	.00000	2	2	2
NODE	43	1.31438	.00000	.00000	2	2	2
NODE	44	1.31469	.27100	.00000	2	2	
NODE	45	1.31505	.54200	.00000	2	2	

NODE	46	1.31522	.81300	.00000	2	2	
NODE	47	1.31501	1.08400	.00000	2	2	
NODE	48	1.31457	1.43800	.00000	2	2	
NODE	49	1.31401	1.79200	.00000	2	2	
NODE	50	1.31328	2.14600	.00000	2	2	
NODE	51	1.31271	2.50000	.00000	2	2	2
NODE	52	1.31882	.00000	.00000	2	2	2
NODE	53	1.31922	.54200	.00000	2	2	
NODE	54	1.31959	1.08400	.00000	2	2	
NODE	55	1.31871	1.79200	.00000	2	2	
NODE	56	1.31657	2.50000	.00000	2	2	2
NODE	57	1.32330	.00000	.00000	2	2	2
NODE	58	1.32336	.27100	.00000	2	2	
NODE	59	1.32356	.54200	.00000	2	2	
NODE	60	1.32360	.81300	.00000	2	2	
NODE	61	1.32396	1.08400	.00000	2	2	
NODE	505	1.32404	1.26100	.00000	2	2	
NODE	62	1.32383	1.43800	.00000	2	2	
NODE	506	1.32378	1.61500	.00000	2	2	
NODE	63	1.32324	1.79200	.00000	2	2	
NODE	507	1.32229	1.96500	.00000	2	2	
NODE	64	1.32174	2.14600	.00000	2	2	
NODE	508	1.32106	2.32300	.00000	2	2	
NODE	65	1.32073	2.50000	.00000	2	2	2
NODE	66	1.33606	.00000	.00000	2	2	2
NODE	67	1.33618	.54850	.00000	2	2	
NODE	68	1.33629	1.09680	.00000	2	2	
NODE	69	1.34874	.00000	.00000	2	2	2
NODE	70	1.34875	.27750	.00000	2	2	
NODE	71	1.34877	.55500	.00000	2	2	
NODE	72	1.34881	.83220	.00000	2	2	
NODE	73	1.34877	1.10950	.00000	2	2	
NODE	74	1.37372	.00000	.00000	2	2	2
NODE	75	1.37372	.56800	.00000	2	2	
NODE	76	1.37373	1.13500	.00000	2	2	
NODE	77	1.37377	1.81800	.00000	2	2	
NODE	78	1.37377	2.50000	.00000	2	2	2
NODE	79	1.47352	.00000	.00000	2	2	2
NODE	80	1.47354	.56800	.00000	2	2	
NODE	81	1.47358	1.13500	.00000	2	2	
NODE	82	1.47362	1.81800	.00000	2	2	
NODE	83	1.47364	2.50000	.00000	2	2	2
NODE	84	1.57376	.00000	.00000	2	2	2
NODE	85	1.57375	.56800	.00000	2	2	
NODE	86	1.57369	1.13500	.00000	2	2	
NODE	87	1.57361	1.81800	.00000	2	2	
NODE	88	1.57358	2.50000	.00000	2	2	2

CFHC CYLINDER 34 COMPUTED CYCLE 103 DISPLACEMENTS

		U	V	W
NODE	1	.37476115-04	.00000000	.00000000
NODE	101	-.37949603-05	.00000000	.00000000
NODE	2	-.58361271-04	.00000000	.00000000
NODE	102	-.10029995-03	.00000000	.00000000
NODE	3	-.14055590-03	.00000000	.00000000
NODE	103	-.14946920-03	.00000000	.00000000
NODE	4	-.15742247-03	.00000000	.00000000
NODE	104	-.17747474-03	.00000000	.00000000
NODE	5	-.18890105-03	.00000000	.00000000
NODE	105	-.20262928-03	.00000000	.00000000
NODE	6	-.21570038-03	.00000000	.00000000
NODE	106	-.22380486-03	.00000000	.00000000
NODE	7	-.23170449-03	.00000000	.00000000
NODE	107	-.23619988-03	.00000000	.00000000
NODE	8	-.23774184-03	.00000000	.00000000
NODE	108	-.23336764-03	.00000000	.00000000
NODE	9	-.22803729-03	.00000000	.00000000
NODE	10	-.26585738-04	.00000000	.00000000
NODE	11	-.97779121-04	.00000000	.00000000
NODE	12	-.18248246-03	.00000000	.00000000
NODE	13	-.23589333-03	.00000000	.00000000
NODE	14	-.23780811-03	.00000000	.00000000
NODE	15	-.55540542-04	.00000000	.00000000
NODE	16	-.75667864-04	.00000000	.00000000
NODE	17	-.79757039-04	.00000000	.00000000
NODE	18	-.11539945-03	.00000000	.00000000
NODE	19	-.16424572-03	.00000000	.00000000
NODE	20	-.20718720-03	.00000000	.00000000
NODE	21	-.23933570-03	.00000000	.00000000
NODE	22	-.25322940-03	.00000000	.00000000
NODE	23	-.24900050-03	.00000000	.00000000
NODE	24	-.66776294-04	.00000000	.00000000
NODE	25	-.78240017-04	.00000000	.00000000
NODE	26	-.14485026-03	.00000000	.00000000
NODE	27	-.24438254-03	.00000000	.00000000
NODE	28	-.26439945-03	.00000000	.00000000
NODE	29	-.73597621-04	.00000000	.00000000
NODE	30	-.68204376-04	.00000000	.00000000
NODE	31	-.70440001-04	.00000000	.00000000
NODE	32	-.98441509-04	.00000000	.00000000
NODE	33	-.13411495-03	.00000000	.00000000
NODE	34	-.19125637-03	.00000000	.00000000
NODE	35	-.24966360-03	.00000000	.00000000
NODE	36	-.27121208-03	.00000000	.00000000
NODE	37	-.27913158-03	.00000000	.00000000
NODE	38	-.71518793-04	.00000000	.00000000
NODE	39	-.60330538-04	.00000000	.00000000
NODE	40	-.12296885-03	.00000000	.00000000
NODE	41	-.25397516-03	.00000000	.00000000
NODE	42	-.29458408-03	.00000000	.00000000
NODE	43	-.61171522-04	.00000000	.00000000
NODE	44	-.55287324-04	.00000000	.00000000
NODE	45	-.55678451-04	.00000000	.00000000

NODE	46	-.71002461-04	.00000000	.00000000
NODE	47	-.10679517-03	.00000000	.00000000
NODE	48	-.20256350-03	.00000000	.00000000
NODE	49	-.26017427-03	.00000000	.00000000
NODE	50	-.28703222-03	.00000000	.00000000
NODE	51	-.31214627-03	.00000000	.00000000
NODE	52	-.48088627-04	.00000000	.00000000
NODE	53	-.52087998-04	.00000000	.00000000
NODE	54	-.88084038-04	.00000000	.00000000
NODE	55	-.25854073-03	.00000000	.00000000
NODE	56	-.33932948-03	.00000000	.00000000
NODE	57	-.38831960-04	.00000000	.00000000
NODE	58	-.36427591-04	.00000000	.00000000
NODE	59	-.45728346-04	.00000000	.00000000
NODE	60	-.58628068-04	.00000000	.00000000
NODE	61	-.77890232-04	.00000000	.00000000
NODE	505	-.14807821-03	.00000000	.00000000
NODE	62	-.18996501-03	.00000000	.00000000
NODE	506	-.22773044-03	.00000000	.00000000
NODE	63	-.24684262-03	.00000000	.00000000
NODE	507	-.28418656-03	.00000000	.00000000
NODE	64	-.31736540-03	.00000000	.00000000
NODE	508	-.35292259-03	.00000000	.00000000
NODE	65	-.38290094-03	.00000000	.00000000
NODE	66	-.15652608-04	.00000000	.00000000
NODE	67	-.19475119-04	.00000000	.00000000
NODE	68	-.45611654-04	.00000000	.00000000
NODE	69	-.65800987-05	.00000000	.00000000
NODE	70	-.85069069-05	.00000000	.00000000
NODE	71	-.61779920-05	.00000000	.00000000
NODE	72	-.85803867-05	.00000000	.00000000
NODE	73	-.17994287-04	.00000000	.00000000
NODE	74	-.16804144-04	.00000000	.00000000
NODE	75	-.16082791-04	.00000000	.00000000
NODE	76	-.14003383-04	.00000000	.00000000
NODE	77	-.10870307-04	.00000000	.00000000
NODE	78	-.99405952-05	.00000000	.00000000
NODE	79	-.12707024-04	.00000000	.00000000
NODE	80	-.12152830-04	.00000000	.00000000
NODE	81	-.10625276-04	.00000000	.00000000
NODE	82	-.92355276-05	.00000000	.00000000
NODE	83	-.83033146-05	.00000000	.00000000
NODE	84	.19710460-05	.00000000	.00000000
NODE	85	.13936369-05	.00000000	.00000000
NODE	86	-.93927326-07	.00000000	.00000000
NODE	87	-.21765100-05	.00000000	.00000000
NODE	88	-.32590515-05	.00000000	.00000000

CFHC CYLINDER 34 COMPUTED CYCLE 104 DISPLACEMENTS

		U	V	W
NODE	1	.52454794-04	.00000000	.00000000
NODE	101	-.10551387-04	.00000000	.00000000
NODE	2	-.88745379-04	.00000000	.00000000
NODE	102	-.15058008-03	.00000000	.00000000
NODE	3	-.20848626-03	.00000000	.00000000
NODE	103	-.21876342-03	.00000000	.00000000
NODE	4	-.22687243-03	.00000000	.00000000
NODE	104	-.25058771-03	.00000000	.00000000
NODE	5	-.26261527-03	.00000000	.00000000
NODE	105	-.27670851-03	.00000000	.00000000
NODE	6	-.28948137-03	.00000000	.00000000
NODE	106	-.29612286-03	.00000000	.00000000
NODE	7	-.30136900-03	.00000000	.00000000
NODE	107	-.30077086-03	.00000000	.00000000
NODE	8	-.29796478-03	.00000000	.00000000
NODE	108	-.28835773-03	.00000000	.00000000
NODE	9	-.27951295-03	.00000000	.00000000
NODE	10	-.47175447-04	.00000000	.00000000
NODE	11	-.15022868-03	.00000000	.00000000
NODE	12	-.25298004-03	.00000000	.00000000
NODE	13	-.30470290-03	.00000000	.00000000
NODE	14	-.28779055-03	.00000000	.00000000
NODE	15	-.95250623-04	.00000000	.00000000
NODE	16	-.12354326-03	.00000000	.00000000
NODE	17	-.12680987-03	.00000000	.00000000
NODE	18	-.17001944-03	.00000000	.00000000
NODE	19	-.22752756-03	.00000000	.00000000
NODE	20	-.27405401-03	.00000000	.00000000
NODE	21	-.30628568-03	.00000000	.00000000
NODE	22	-.31278655-03	.00000000	.00000000
NODE	23	-.30055456-03	.00000000	.00000000
NODE	24	-.11721461-03	.00000000	.00000000
NODE	25	-.12734550-03	.00000000	.00000000
NODE	26	-.20110117-03	.00000000	.00000000
NODE	27	-.30904333-03	.00000000	.00000000
NODE	28	-.32003666-03	.00000000	.00000000
NODE	29	-.13300615-03	.00000000	.00000000
NODE	30	-.12261278-03	.00000000	.00000000
NODE	31	-.11945740-03	.00000000	.00000000
NODE	32	-.14962799-03	.00000000	.00000000
NODE	33	-.18769350-03	.00000000	.00000000
NODE	34	-.24080958-03	.00000000	.00000000
NODE	35	-.31132624-03	.00000000	.00000000
NODE	36	-.33153337-03	.00000000	.00000000
NODE	37	-.33868128-03	.00000000	.00000000
NODE	38	-.13578424-03	.00000000	.00000000
NODE	39	-.10936517-03	.00000000	.00000000
NODE	40	-.17514019-03	.00000000	.00000000
NODE	41	-.31320378-03	.00000000	.00000000
NODE	42	-.35853055-03	.00000000	.00000000
NODE	43	-.12567174-03	.00000000	.00000000
NODE	44	-.11399663-03	.00000000	.00000000
NODE	45	-.10804545-03	.00000000	.00000000

NODE	46	-.11956705-03	.00000000	.00000000
NODE	47	-.15546908-03	.00000000	.00000000
NODE	48	-.25711278-03	.00000000	.00000000
NODE	49	-.31781057-03	.00000000	.00000000
NODE	50	-.34536282-03	.00000000	.00000000
NODE	51	-.38035889-03	.00000000	.00000000
NODE	52	-.10972186-03	.00000000	.00000000
NODE	53	-.10761476-03	.00000000	.00000000
NODE	54	-.13368264-03	.00000000	.00000000
NODE	55	-.31118817-03	.00000000	.00000000
NODE	56	-.41484227-03	.00000000	.00000000
NODE	57	-.98225719-04	.00000000	.00000000
NODE	58	-.94514558-04	.00000000	.00000000
NODE	59	-.10163350-03	.00000000	.00000000
NODE	60	-.11116161-03	.00000000	.00000000
NODE	61	-.12460700-03	.00000000	.00000000
NODE	505	-.19365043-03	.00000000	.00000000
NODE	62	-.23644103-03	.00000000	.00000000
NODE	506	-.27239299-03	.00000000	.00000000
NODE	63	-.28978032-03	.00000000	.00000000
NODE	507	-.33527939-03	.00000000	.00000000
NODE	64	-.37928880-03	.00000000	.00000000
NODE	508	-.42879093-03	.00000000	.00000000
NODE	65	-.47075564-03	.00000000	.00000000
NODE	66	-.69868853-04	.00000000	.00000000
NODE	67	-.72239258-04	.00000000	.00000000
NODE	68	-.96968681-04	.00000000	.00000000
NODE	69	-.57470650-04	.00000000	.00000000
NODE	70	-.59626327-04	.00000000	.00000000
NODE	71	-.56621197-04	.00000000	.00000000
NODE	72	-.58846039-04	.00000000	.00000000
NODE	73	-.69192538-04	.00000000	.00000000
NODE	74	-.66925044-04	.00000000	.00000000
NODE	75	-.66226072-04	.00000000	.00000000
NODE	76	-.64123815-04	.00000000	.00000000
NODE	77	-.60637482-04	.00000000	.00000000
NODE	78	-.59639380-04	.00000000	.00000000
NODE	79	-.61195795-04	.00000000	.00000000
NODE	80	-.60537801-04	.00000000	.00000000
NODE	81	-.58646649-04	.00000000	.00000000
NODE	82	-.56864694-04	.00000000	.00000000
NODE	83	-.55801400-04	.00000000	.00000000
NODE	84	-.40893225-04	.00000000	.00000000
NODE	85	-.41615538-04	.00000000	.00000000
NODE	86	-.43587992-04	.00000000	.00000000
NODE	87	-.46353161-04	.00000000	.00000000
NODE	88	-.47735375-04	.00000000	.00000000

OFHC CYLINDER 34 COMPUTED CYCLE 105 DISPLACEMENTS

		U	V	W
NODE	1	.68108755-04	.00000000	.00000000
NODE	101	-.17127837-04	.00000000	.00000000
NODE	2	-.11834914-03	.00000000	.00000000
NODE	102	-.20036826-03	.00000000	.00000000
NODE	3	-.27648406-03	.00000000	.00000000
NODE	103	-.28784992-03	.00000000	.00000000
NODE	4	-.29557827-03	.00000000	.00000000
NODE	104	-.32216567-03	.00000000	.00000000
NODE	5	-.33424376-03	.00000000	.00000000
NODE	105	-.34831930-03	.00000000	.00000000
NODE	6	-.36026351-03	.00000000	.00000000
NODE	106	-.36514504-03	.00000000	.00000000
NODE	7	-.36728452-03	.00000000	.00000000
NODE	107	-.36102557-03	.00000000	.00000000
NODE	8	-.35349047-03	.00000000	.00000000
NODE	108	-.33834414-03	.00000000	.00000000
NODE	9	-.32587140-03	.00000000	.00000000
NODE	10	-.67247616-04	.00000000	.00000000
NODE	11	-.20701843-03	.00000000	.00000000
NODE	12	-.32148161-03	.00000000	.00000000
NODE	13	-.36984473-03	.00000000	.00000000
NODE	14	-.33263839-03	.00000000	.00000000
NODE	15	-.13484016-03	.00000000	.00000000
NODE	16	-.17091418-03	.00000000	.00000000
NODE	17	-.17405830-03	.00000000	.00000000
NODE	18	-.22411777-03	.00000000	.00000000
NODE	19	-.28923131-03	.00000000	.00000000
NODE	20	-.33807475-03	.00000000	.00000000
NODE	21	-.36951294-03	.00000000	.00000000
NODE	22	-.36776601-03	.00000000	.00000000
NODE	23	-.34712162-03	.00000000	.00000000
NODE	24	-.16759882-03	.00000000	.00000000
NODE	25	-.17607304-03	.00000000	.00000000
NODE	26	-.25614654-03	.00000000	.00000000
NODE	27	-.36975974-03	.00000000	.00000000
NODE	28	-.37079770-03	.00000000	.00000000
NODE	29	-.19227443-03	.00000000	.00000000
NODE	30	-.17673560-03	.00000000	.00000000
NODE	31	-.16783226-03	.00000000	.00000000
NODE	32	-.20018080-03	.00000000	.00000000
NODE	33	-.24025515-03	.00000000	.00000000
NODE	34	-.30393177-03	.00000000	.00000000
NODE	35	-.36884611-03	.00000000	.00000000
NODE	36	-.38739201-03	.00000000	.00000000
NODE	37	-.39339764-03	.00000000	.00000000
NODE	38	-.20003514-03	.00000000	.00000000
NODE	39	-.15790047-03	.00000000	.00000000
NODE	40	-.22636967-03	.00000000	.00000000
NODE	41	-.36841771-03	.00000000	.00000000
NODE	42	-.41780248-03	.00000000	.00000000
NODE	43	-.19046765-03	.00000000	.00000000
NODE	44	-.17281508-03	.00000000	.00000000
NODE	45	-.16009165-03	.00000000	.00000000

NODE	46	-.16733709-03	.0C000C00	.CCCCCCCC
NODE	47	-.20299565-03	.0C000000	.CCCCCCCC
NODE	48	-.30871551-03	.0C000000	.CCCCCCCC
NODE	49	-.37176814-03	.0C000000	.CCCCCCCC
NODE	50	-.39920025-03	.0C000000	.CCCCCCCC
NODE	51	-.44391770-03	.0C000000	.CCCCCCCC
NODE	52	-.17181977-03	.0C000000	.CCCCCCCC
NODE	53	-.16288142-03	.0C000000	.CCCCCCCC
NODE	54	-.17786355-03	.0C000000	.CCCCCCCC
NODE	55	-.36028400-03	.0C000000	.CCCCCCCC
NODE	56	-.48588100-03	.0C000000	.CCCCCCCC
NODE	57	-.15805371-03	.0C000000	.CCCCCCCC
NODE	58	-.15318563-03	.0C000000	.CCCCCCCC
NODE	59	-.15734172-03	.0C000000	.CCCCCCCC
NODE	60	-.16286304-03	.0C000000	.CCCCCCCC
NODE	61	-.16990188-03	.0C000000	.CCCCCCCC
NODE	505	-.23646046-03	.0C000000	.CCCCCCCC
NODE	62	-.27959445-03	.0C000000	.CCCCCCCC
NODE	506	-.31317631-03	.0C000000	.CCCCCCCC
NODE	63	-.32891333-03	.0C000000	.CCCCCCCC
NODE	507	-.38224738-03	.0C000000	.CCCCCCCC
NODE	64	-.43692789-03	.0C000000	.CCCCCCCC
NODE	508	-.50043338-03	.0C000000	.CCCCCCCC
NODE	65	-.56082918-03	.0C000000	.CCCCCCCC
NODE	66	-.12500327-03	.0C000000	.CCCCCCCC
NODE	67	-.12570016-03	.0C000000	.CCCCCCCC
NODE	68	-.14798276-03	.0C000000	.CCCCCCCC
NODE	69	-.10975845-03	.0C000000	.CCCCCCCC
NODE	70	-.11193079-03	.0C000000	.CCCCCCCC
NODE	71	-.10839247-03	.0C000000	.CCCCCCCC
NODE	72	-.11036028-03	.0C000000	.CCCCCCCC
NODE	73	-.12112624-03	.0C000000	.CCCCCCCC
NODE	74	-.11817833-03	.0C000000	.CCCCCCCC
NODE	75	-.11750958-03	.0C000000	.CCCCCCCC
NODE	76	-.11537284-03	.0C000000	.CCCCCCCC
NODE	77	-.11169347-03	.0C000000	.CCCCCCCC
NODE	78	-.11061643-03	.0C000000	.CCCCCCCC
NODE	79	-.11075022-03	.0C000000	.CCCCCCCC
NODE	80	-.10999663-03	.0C000000	.CCCCCCCC
NODE	81	-.10779203-03	.0C000000	.CCCCCCCC
NODE	82	-.10563763-03	.0C000000	.CCCCCCCC
NODE	83	-.10444703-03	.0C000000	.CCCCCCCC
NODE	84	-.84981904-04	.0C000000	.CCCCCCCC
NODE	85	-.85739099-04	.0C000000	.CCCCCCCC
NODE	86	-.88153218-04	.0C000000	.CCCCCCCC
NODE	87	-.91591370-04	.0C000000	.CCCCCCCC
NODE	88	-.93284762-04	.0C000000	.CCCCCCCC

COMPUTED CYCLE 105

		R	THETA	Z			
NODE	1	1.29218	.0000	.0000	2	2	2
NODE	101	1.29160	.1355	.0000	2	2	
NODE	2	1.29075	.2710	.0000	2	2	
NODE	102	1.28992	.4065	.0000	2	2	
NODE	3	1.28891	.5420	.0000	2	2	
NODE	103	1.28832	.6775	.0000	2	2	
NODE	4	1.28789	.8130	.0000	2	2	
NODE	104	1.28741	.9485	.0000	2	2	
NODE	5	1.28702	1.0840	.0000	2	2	
NODE	105	1.28662	1.2610	.0000	2	2	
NODE	6	1.28645	1.4380	.0000	2	2	
NODE	106	1.28630	1.6150	.0000	2	2	
NODE	7	1.28638	1.7920	.0000	2	2	
NODE	107	1.28658	1.9690	.0000	2	2	
NODE	8	1.28669	2.1460	.0000	2	2	
NODE	108	1.28684	2.3230	.0000	2	2	
NODE	9	1.28691	2.5000	.0000	2	2	2
NODE	10	1.29547	.0000	.0000	2	2	2
NODE	11	1.29326	.5420	.0000	2	2	
NODE	12	1.29143	1.0840	.0000	2	2	
NODE	13	1.29071	1.7920	.0000	2	2	
NODE	14	1.29131	2.5000	.0000	2	2	2
NODE	15	1.29888	.0000	.0000	2	2	2
NODE	16	1.29837	.2710	.0000	2	2	
NODE	17	1.29753	.5420	.0000	2	2	
NODE	18	1.29667	.8130	.0000	2	2	
NODE	19	1.29590	1.0840	.0000	2	2	
NODE	20	1.29532	1.4380	.0000	2	2	
NODE	21	1.29512	1.7920	.0000	2	2	
NODE	22	1.29536	2.1460	.0000	2	2	
NODE	23	1.29560	2.5000	.0000	2	2	2
NODE	24	1.30256	.0000	.0000	2	2	2
NODE	25	1.30199	.5420	.0000	2	2	
NODE	26	1.30066	1.0840	.0000	2	2	
NODE	27	1.29979	1.7920	.0000	2	2	
NODE	28	1.30006	2.5000	.0000	2	2	2
NODE	29	1.30624	.0000	.0000	2	2	2
NODE	30	1.30643	.2710	.0000	2	2	
NODE	31	1.30650	.5420	.0000	2	2	
NODE	32	1.30602	.8130	.0000	2	2	
NODE	33	1.30548	1.0840	.0000	2	2	
NODE	34	1.30483	1.4380	.0000	2	2	
NODE	35	1.30444	1.7920	.0000	2	2	
NODE	36	1.30440	2.1460	.0000	2	2	
NODE	37	1.30442	2.5000	.0000	2	2	2
NODE	38	1.31001	.0000	.0000	2	2	2
NODE	39	1.31079	.5420	.0000	2	2	
NODE	40	1.31015	1.0840	.0000	2	2	
NODE	41	1.30898	1.7920	.0000	2	2	
NODE	42	1.30849	2.5000	.0000	2	2	2
NODE	43	1.31419	.0000	.0000	2	2	2
NODE	44	1.31452	.2710	.0000	2	2	
NODE	45	1.31489	.5420	.0000	2	2	

NODE	46	1.31505	.8130	.0000	2	2	
NODE	47	1.31481	1.0840	.0000	2	2	
NODE	48	1.31426	1.4380	.0000	2	2	
NODE	49	1.31364	1.7920	.0000	2	2	
NODE	50	1.31288	2.1460	.0000	2	2	
NODE	51	1.31227	2.5000	.0000	2	2	2
NODE	52	1.31865	.0000	.0000	2	2	2
NODE	53	1.31906	.5420	.0000	2	2	
NODE	54	1.31941	1.0840	.0000	2	2	
NODE	55	1.31835	1.7920	.0000	2	2	
NODE	56	1.31608	2.5000	.0000	2	2	2
NODE	57	1.32314	.0000	.0000	2	2	2
NODE	58	1.32321	.2710	.0000	2	2	
NODE	59	1.32340	.5420	.0000	2	2	
NODE	60	1.32344	.8130	.0000	2	2	
NODE	61	1.32379	1.0840	.0000	2	2	
NODE	505	1.32380	1.2610	.0000	2	2	
NODE	62	1.32355	1.4380	.0000	2	2	
NODE	506	1.32347	1.6150	.0000	2	2	
NODE	63	1.32291	1.7920	.0000	2	2	
NODE	507	1.32191	1.9690	.0000	2	2	
NODE	64	1.32130	2.1460	.0000	2	2	
NODE	508	1.32056	2.3230	.0000	2	2	
NODE	65	1.32017	2.5000	.0000	2	2	2
NODE	66	1.33594	.0000	.0000	2	2	2
NODE	67	1.33605	.5485	.0000	2	2	
NODE	68	1.33614	1.0968	.0000	2	2	
NODE	69	1.34863	.0000	.0000	2	2	2
NODE	70	1.34864	.2775	.0000	2	2	
NODE	71	1.34866	.5550	.0000	2	2	
NODE	72	1.34870	.8322	.0000	2	2	
NODE	73	1.34865	1.1095	.0000	2	2	
NODE	74	1.37360	.0000	.0000	2	2	2
NODE	75	1.37360	.5680	.0000	2	2	
NODE	76	1.37361	1.1350	.0000	2	2	
NODE	77	1.37366	1.8180	.0000	2	2	
NODE	78	1.37366	2.5000	.0000	2	2	2
NODE	79	1.47341	.0000	.0000	2	2	2
NODE	80	1.47343	.5680	.0000	2	2	
NODE	81	1.47347	1.1350	.0000	2	2	
NODE	82	1.47351	1.8180	.0000	2	2	
NODE	83	1.47354	2.5000	.0000	2	2	2
NODE	84	1.57368	.0000	.0000	2	2	2
NODE	85	1.57366	.5680	.0000	2	2	
NODE	86	1.57360	1.1350	.0000	2	2	
NODE	87	1.57352	1.8180	.0000	2	2	
NODE	88	1.57349	2.5000	.0000	2	2	2

EXTRAPOLATED CYCLE 105

		DISPLACEMENTS			PERCENT DEVIATION		
		U	V	W	U	V	W
NODE	1	.67989313-04	.00000000	.00000000	.17537	.00000	.00000
NODE	101	-.17156373-04	.00000000	.00000000	-.16661	.00000	.00000
NODE	2	-.11847942-03	.00000000	.00000000	-.11008	.00000	.00000
NODE	102	-.20048645-03	.00000000	.00000000	-.05899	.00000	.00000
NODE	3	-.27650804-03	.00000000	.00000000	-.00867	.00000	.00000
NODE	103	-.28788199-03	.00000000	.00000000	-.01114	.00000	.00000
NODE	4	-.29570487-03	.00000000	.00000000	-.04283	.00000	.00000
NODE	104	-.32243907-03	.00000000	.00000000	-.08486	.00000	.00000
NODE	5	-.33465115-03	.00000000	.00000000	-.12188	.00000	.00000
NODE	105	-.34877961-03	.00000000	.00000000	-.13215	.00000	.00000
NODE	6	-.36075275-03	.00000000	.00000000	-.13580	.00000	.00000
NODE	106	-.36566326-03	.00000000	.00000000	-.14192	.00000	.00000
NODE	7	-.36789407-03	.00000000	.00000000	-.16596	.00000	.00000
NODE	107	-.36174239-03	.00000000	.00000000	-.19855	.00000	.00000
NODE	8	-.35427324-03	.00000000	.00000000	-.22144	.00000	.00000
NODE	108	-.33922179-03	.00000000	.00000000	-.25940	.00000	.00000
NODE	9	-.32672414-03	.00000000	.00000000	-.26168	.00000	.00000
NODE	10	-.67332207-04	.00000000	.00000000	-.12579	.00000	.00000
NODE	11	-.20295969-03	.00000000	.00000000	.02893	.00000	.00000
NODE	12	-.32181095-03	.00000000	.00000000	-.10244	.00000	.00000
NODE	13	-.37048251-03	.00000000	.00000000	-.17244	.00000	.00000
NODE	14	-.33355755-03	.00000000	.00000000	-.27632	.00000	.00000
NODE	15	-.13487070-03	.00000000	.00000000	-.02265	.00000	.00000
NODE	16	-.17100730-03	.00000000	.00000000	-.05448	.00000	.00000
NODE	17	-.17403020-03	.00000000	.00000000	.01615	.00000	.00000
NODE	18	-.22420002-03	.00000000	.00000000	-.03670	.00000	.00000
NODE	19	-.28946181-03	.00000000	.00000000	-.07969	.00000	.00000
NODE	20	-.33855753-03	.00000000	.00000000	-.14280	.00000	.00000
NODE	21	-.37017022-03	.00000000	.00000000	-.17788	.00000	.00000
NODE	22	-.36852865-03	.00000000	.00000000	-.20737	.00000	.00000
NODE	23	-.34794275-03	.00000000	.00000000	-.23656	.00000	.00000
NODE	24	-.16760256-03	.00000000	.00000000	-.00223	.00000	.00000
NODE	25	-.17613376-03	.00000000	.00000000	-.03449	.00000	.00000
NODE	26	-.25635149-03	.00000000	.00000000	-.08001	.00000	.00000
NODE	27	-.37042232-03	.00000000	.00000000	-.17919	.00000	.00000
NODE	28	-.37160207-03	.00000000	.00000000	-.21693	.00000	.00000
NODE	29	-.19229145-03	.00000000	.00000000	-.00885	.00000	.00000
NODE	30	-.17679791-03	.00000000	.00000000	-.03526	.00000	.00000
NODE	31	-.16794394-03	.00000000	.00000000	-.06655	.00000	.00000
NODE	32	-.20027341-03	.00000000	.00000000	-.04626	.00000	.00000
NODE	33	-.24038961-03	.00000000	.00000000	-.05596	.00000	.00000
NODE	34	-.30434964-03	.00000000	.00000000	-.13749	.00000	.00000
NODE	35	-.36961026-03	.00000000	.00000000	-.20717	.00000	.00000
NODE	36	-.38810069-03	.00000000	.00000000	-.18293	.00000	.00000
NODE	37	-.39422634-03	.00000000	.00000000	-.21065	.00000	.00000
NODE	38	-.20003249-03	.00000000	.00000000	.00132	.00000	.00000
NODE	39	-.15797804-03	.00000000	.00000000	-.04912	.00000	.00000
NODE	40	-.22654544-03	.00000000	.00000000	-.07765	.00000	.00000
NODE	41	-.36912283-03	.00000000	.00000000	-.19139	.00000	.00000
NODE	42	-.41858107-03	.00000000	.00000000	-.18635	.00000	.00000
NODE	43	-.19041239-03	.00000000	.00000000	.02901	.00000	.00000
NODE	44	-.17280114-03	.00000000	.00000000	.00807	.00000	.00000
NODE	45	-.16013812-03	.00000000	.00000000	-.03529	.00000	.00000

NODE	46	-.16749086-03	.00000000	.00000000	-.09189	.00000	.00000
NODE	47	-.20320649-03	.00000000	.00000000	-.10387	.00000	.00000
NODE	48	-.30918943-03	.00000000	.00000000	-.15351	.00000	.00000
NODE	49	-.37237193-03	.00000000	.00000000	-.16241	.00000	.00000
NODE	50	-.39990799-03	.00000000	.00000000	-.17729	.00000	.00000
NODE	51	-.44475251-03	.00000000	.00000000	-.18806	.00000	.00000
NODE	52	-.17173792-03	.00000000	.00000000	.04764	.00000	.00000
NODE	53	-.16292225-03	.00000000	.00000000	-.02507	.00000	.00000
NODE	54	-.17810968-03	.00000000	.00000000	-.13838	.00000	.00000
NODE	55	-.36088499-03	.00000000	.00000000	-.16681	.00000	.00000
NODE	56	-.48659806-03	.00000000	.00000000	-.14758	.00000	.00000
NODE	57	-.15798473-03	.00000000	.00000000	.04364	.00000	.00000
NODE	58	-.15308440-03	.00000000	.00000000	.06608	.00000	.00000
NODE	59	-.15737157-03	.00000000	.00000000	-.01897	.00000	.00000
NODE	60	-.16300689-03	.00000000	.00000000	-.08832	.00000	.00000
NODE	61	-.17012359-03	.00000000	.00000000	-.13049	.00000	.00000
NODE	505	-.23688813-03	.00000000	.00000000	-.18086	.00000	.00000
NODE	62	-.28012873-03	.00000000	.00000000	-.19109	.00000	.00000
NODE	506	-.31385443-03	.00000000	.00000000	-.21653	.00000	.00000
NODE	63	-.32954162-03	.00000000	.00000000	-.19102	.00000	.00000
NODE	507	-.38293499-03	.00000000	.00000000	-.17989	.00000	.00000
NODE	64	-.43758930-03	.00000000	.00000000	-.15138	.00000	.00000
NODE	508	-.50114963-03	.00000000	.00000000	-.14312	.00000	.00000
NODE	65	-.56046620-03	.00000000	.00000000	.06472	.00000	.00000
NODE	66	-.12485852-03	.00000000	.00000000	.11580	.00000	.00000
NODE	67	-.12558553-03	.00000000	.00000000	.09119	.00000	.00000
NODE	68	-.14803943-03	.00000000	.00000000	-.03829	.00000	.00000
NODE	69	-.10953116-03	.00000000	.00000000	.20708	.00000	.00000
NODE	70	-.11173740-03	.00000000	.00000000	.17277	.00000	.00000
NODE	71	-.10817870-03	.00000000	.00000000	.19721	.00000	.00000
NODE	72	-.11015049-03	.00000000	.00000000	.19010	.00000	.00000
NODE	73	-.12100412-03	.00000000	.00000000	.10082	.00000	.00000
NODE	74	-.11798192-03	.00000000	.00000000	.16620	.00000	.00000
NODE	75	-.11731905-03	.00000000	.00000000	.16214	.00000	.00000
NODE	76	-.11518621-03	.00000000	.00000000	.16176	.00000	.00000
NODE	77	-.11147407-03	.00000000	.00000000	.19643	.00000	.00000
NODE	78	-.11040631-03	.00000000	.00000000	.18995	.00000	.00000
NODE	79	-.11057209-03	.00000000	.00000000	.16084	.00000	.00000
NODE	80	-.10982237-03	.00000000	.00000000	.15842	.00000	.00000
NODE	81	-.10761683-03	.00000000	.00000000	.16254	.00000	.00000
NODE	82	-.10544265-03	.00000000	.00000000	.18457	.00000	.00000
NODE	83	-.10425405-03	.00000000	.00000000	.18476	.00000	.00000
NODE	84	-.84703905-04	.00000000	.00000000	.20970	.00000	.00000
NODE	85	-.85550360-04	.00000000	.00000000	.22013	.00000	.00000
NODE	86	-.87986875-04	.00000000	.00000000	.18870	.00000	.00000
NODE	87	-.91412046-04	.00000000	.00000000	.19579	.00000	.00000
NODE	88	-.93101873-04	.00000000	.00000000	.19605	.00000	.00000

EXTRAPOLATED CYCLE 105

		R	THETA	Z			
NODE	1	1.29218	.0000	.0000	2	2	2
NODE	101	1.29160	.1355	.0000	2	2	
NODE	2	1.29075	.2710	.0000	2	2	
NODE	102	1.28992	.4065	.0000	2	2	
NODE	3	1.28891	.5420	.0000	2	2	
NODE	103	1.28832	.6775	.0000	2	2	
NODE	4	1.28789	.8130	.0000	2	2	
NODE	104	1.28741	.9485	.0000	2	2	
NODE	5	1.28702	1.0840	.0000	2	2	
NODE	105	1.28662	1.2610	.0000	2	2	
NODE	6	1.28645	1.4380	.0000	2	2	
NODE	106	1.28630	1.6150	.0000	2	2	
NODE	7	1.28638	1.7920	.0000	2	2	
NODE	107	1.28658	1.9690	.0000	2	2	
NODE	8	1.28669	2.1460	.0000	2	2	
NODE	108	1.28684	2.3230	.0000	2	2	
NODE	9	1.28691	2.5000	.0000	2	2	2
NODE	10	1.29547	.0000	.0000	2	2	2
NODE	11	1.29326	.5420	.0000	2	2	
NODE	12	1.29143	1.0840	.0000	2	2	
NODE	13	1.29071	1.7920	.0000	2	2	
NODE	14	1.29131	2.5000	.0000	2	2	2
NODE	15	1.29888	.0000	.0000	2	2	2
NODE	16	1.29837	.2710	.0000	2	2	
NODE	17	1.29753	.5420	.0000	2	2	
NODE	18	1.29667	.8130	.0000	2	2	
NODE	19	1.29590	1.0840	.0000	2	2	
NODE	20	1.29532	1.4380	.0000	2	2	
NODE	21	1.29512	1.7920	.0000	2	2	
NODE	22	1.29536	2.1460	.0000	2	2	
NODE	23	1.29560	2.5000	.0000	2	2	2
NODE	24	1.30256	.0000	.0000	2	2	2
NODE	25	1.30199	.5420	.0000	2	2	
NODE	26	1.30066	1.0840	.0000	2	2	
NODE	27	1.29979	1.7920	.0000	2	2	
NODE	28	1.30006	2.5000	.0000	2	2	2
NODE	29	1.30624	.0000	.0000	2	2	2
NODE	30	1.30643	.2710	.0000	2	2	
NODE	31	1.30650	.5420	.0000	2	2	
NODE	32	1.30602	.8130	.0000	2	2	
NODE	33	1.30548	1.0840	.0000	2	2	
NODE	34	1.30483	1.4380	.0000	2	2	
NODE	35	1.30444	1.7920	.0000	2	2	
NODE	36	1.30440	2.1460	.0000	2	2	
NODE	37	1.30442	2.5000	.0000	2	2	2
NODE	38	1.31001	.0000	.0000	2	2	2
NODE	39	1.31079	.5420	.0000	2	2	
NODE	40	1.31015	1.0840	.0000	2	2	
NODE	41	1.30898	1.7920	.0000	2	2	
NODE	42	1.30849	2.5000	.0000	2	2	2
NODE	43	1.31419	.0000	.0000	2	2	2
NODE	44	1.31452	.2710	.0000	2	2	
NODE	45	1.31489	.5420	.0000	2	2	

NODE	46	1.31505	.8130	.0000	2	2	
NODE	47	1.31481	1.0840	.0000	2	2	
NODE	48	1.31426	1.4380	.0000	2	2	
NODE	49	1.31364	1.7920	.0000	2	2	
NODE	50	1.31288	2.1460	.0000	2	2	
NODE	51	1.31227	2.5000	.0000	2	2	2
NODE	52	1.31865	.0000	.0000	2	2	2
NODE	53	1.31906	.5420	.0000	2	2	
NODE	54	1.31941	1.0840	.0000	2	2	
NODE	55	1.31835	1.7920	.0000	2	2	
NODE	56	1.31608	2.5000	.0000	2	2	2
NODE	57	1.32314	.0000	.0000	2	2	2
NODE	58	1.32321	.2710	.0000	2	2	
NODE	59	1.32340	.5420	.0000	2	2	
NODE	60	1.32344	.8130	.0000	2	2	
NODE	61	1.32379	1.0840	.0000	2	2	
NODE	505	1.32380	1.2610	.0000	2	2	
NODE	62	1.32355	1.4380	.0000	2	2	
NODE	506	1.32347	1.6150	.0000	2	2	
NODE	63	1.32291	1.7920	.0000	2	2	
NODE	507	1.32191	1.9690	.0000	2	2	
NODE	64	1.32130	2.1460	.0000	2	2	
NODE	508	1.32056	2.3230	.0000	2	2	
NODE	65	1.32017	2.5000	.0000	2	2	2
NODE	66	1.33594	.0000	.0000	2	2	2
NODE	67	1.33605	.5485	.0000	2	2	
NODE	68	1.33614	1.0968	.0000	2	2	
NODE	69	1.34863	.0000	.0000	2	2	2
NODE	70	1.34864	.2775	.0000	2	2	
NODE	71	1.34866	.5550	.0000	2	2	
NODE	72	1.34870	.8322	.0000	2	2	
NODE	73	1.34865	1.1095	.0000	2	2	
NODE	74	1.37360	.0000	.0000	2	2	2
NODE	75	1.37360	.5680	.0000	2	2	
NODE	76	1.37361	1.1350	.0000	2	2	
NODE	77	1.37366	1.8180	.0000	2	2	
NODE	78	1.37366	2.5000	.0000	2	2	2
NODE	79	1.47341	.0000	.0000	2	2	2
NODE	80	1.47343	.5680	.0000	2	2	
NODE	81	1.47347	1.1350	.0000	2	2	
NODE	82	1.47351	1.8180	.0000	2	2	
NODE	83	1.47354	2.5000	.0000	2	2	2
NODE	84	1.57368	.0000	.0000	2	2	2
NODE	85	1.57366	.5680	.0000	2	2	
NODE	86	1.57360	1.1350	.0000	2	2	
NODE	87	1.57352	1.8180	.0000	2	2	
NODE	88	1.57349	2.5000	.0000	2	2	2

EXTRAPOLATED CYCLE 110

		U	V	W
NODE	1	.14457043-03	.00000000	.00000000
NODE	101	-.50488510-04	.00000000	.00000000
NODE	2	-.26844876-03	.00000000	.00000000
NODE	102	-.45065032-03	.00000000	.00000000
NODE	3	-.61632751-03	.00000000	.00000000
NODE	103	-.63383265-03	.00000000	.00000000
NODE	4	-.64109516-03	.00000000	.00000000
NODE	104	-.68416633-03	.00000000	.00000000
NODE	5	-.69800823-03	.00000000	.00000000
NODE	105	-.71300438-03	.00000000	.00000000
NODE	6	-.72215870-03	.00000000	.00000000
NODE	106	-.71901327-03	.00000000	.00000000
NODE	7	-.70684275-03	.00000000	.00000000
NODE	107	-.67380688-03	.00000000	.00000000
NODE	8	-.64364448-03	.00000000	.00000000
NODE	108	-.60166541-03	.00000000	.00000000
NODE	9	-.57130808-03	.00000000	.00000000
NODE	10	-.16898647-03	.00000000	.00000000
NODE	11	-.46605681-03	.00000000	.00000000
NODE	12	-.66930917-03	.00000000	.00000000
NODE	13	-.70536131-03	.00000000	.00000000
NODE	14	-.57063502-03	.00000000	.00000000
NODE	15	-.33311982-03	.00000000	.00000000
NODE	16	-.40912320-03	.00000000	.00000000
NODE	17	-.40978286-03	.00000000	.00000000
NODE	18	-.49599569-03	.00000000	.00000000
NODE	19	-.60192368-03	.00000000	.00000000
NODE	20	-.66577771-03	.00000000	.00000000
NODE	21	-.69561473-03	.00000000	.00000000
NODE	22	-.65487000-03	.00000000	.00000000
NODE	23	-.59324381-03	.00000000	.00000000
NODE	24	-.41965803-03	.00000000	.00000000
NODE	25	-.42071537-03	.00000000	.00000000
NODE	26	-.53459033-03	.00000000	.00000000
NODE	27	-.60386516-03	.00000000	.00000000
NODE	28	-.63759711-03	.00000000	.00000000
NODE	29	-.48898289-03	.00000000	.00000000
NODE	30	-.44812635-03	.00000000	.00000000
NODE	31	-.41142508-03	.00000000	.00000000
NODE	32	-.45462075-03	.00000000	.00000000
NODE	33	-.50573738-03	.00000000	.00000000
NODE	34	-.58603595-03	.00000000	.00000000
NODE	35	-.66756830-03	.00000000	.00000000
NODE	36	-.67854917-03	.00000000	.00000000
NODE	37	-.67988783-03	.00000000	.00000000
NODE	38	-.52132329-03	.00000000	.00000000
NODE	39	-.40190230-03	.00000000	.00000000
NODE	40	-.48504648-03	.00000000	.00000000
NODE	41	-.65523136-03	.00000000	.00000000
NODE	42	-.72662532-03	.00000000	.00000000
NODE	43	-.51365199-03	.00000000	.00000000
NODE	44	-.46662026-03	.00000000	.00000000
NODE	45	-.42114593-03	.00000000	.00000000

NODE	46	-.40832779-03	.00000000	.00000000
NODE	47	-.44370815-03	.00000000	.00000000
NODE	48	-.57456829-03	.00000000	.00000000
NODE	49	-.65135583-03	.00000000	.00000000
NODE	50	-.68032613-03	.00000000	.00000000
NODE	51	-.77417993-03	.00000000	.00000000
NODE	52	-.48106507-03	.00000000	.00000000
NODE	53	-.43990614-03	.00000000	.00000000
NODE	54	-.40255766-03	.00000000	.00000000
NODE	55	-.61524165-03	.00000000	.00000000
NODE	56	-.85297110-03	.00000000	.00000000
NODE	57	-.45603979-03	.00000000	.00000000
NODE	58	-.44497877-03	.00000000	.00000000
NODE	59	-.43640437-03	.00000000	.00000000
NODE	60	-.42359409-03	.00000000	.00000000
NODE	61	-.40015177-03	.00000000	.00000000
NODE	505	-.45784441-03	.00000000	.00000000
NODE	62	-.50420186-03	.00000000	.00000000
NODE	506	-.52746880-03	.00000000	.00000000
NODE	63	-.53471822-03	.00000000	.00000000
NODE	507	-.62808394-03	.00000000	.00000000
NODE	64	-.73649111-03	.00000000	.00000000
NODE	508	-.86992234-03	.00000000	.00000000
NODE	65	-.10052845-02	.00000000	.00000000
NODE	66	-.39823510-03	.00000000	.00000000
NODE	67	-.39114832-03	.00000000	.00000000
NODE	68	-.40396769-03	.00000000	.00000000
NODE	69	-.36747725-03	.00000000	.00000000
NODE	70	-.37029665-03	.00000000	.00000000
NODE	71	-.36371499-03	.00000000	.00000000
NODE	72	-.36459946-03	.00000000	.00000000
NODE	73	-.37883379-03	.00000000	.00000000
NODE	74	-.37141732-03	.00000000	.00000000
NODE	75	-.37088559-03	.00000000	.00000000
NODE	76	-.36860956-03	.00000000	.00000000
NODE	77	-.36353187-03	.00000000	.00000000
NODE	78	-.36209589-03	.00000000	.00000000
NODE	79	-.35567989-03	.00000000	.00000000
NODE	80	-.35443233-03	.00000000	.00000000
NODE	81	-.35053369-03	.00000000	.00000000
NODE	82	-.34644798-03	.00000000	.00000000
NODE	83	-.34461293-03	.00000000	.00000000
NODE	84	-.33183635-03	.00000000	.00000000
NODE	85	-.33338205-03	.00000000	.00000000
NODE	86	-.33813523-03	.00000000	.00000000
NODE	87	-.31494925-03	.00000000	.00000000
NODE	88	-.31816569-03	.00000000	.00000000

EXTRAPOLATED CYCLE 110

		R	THETA	Z			
NODE	1	1.29225	.0000	.0000	2	2	2
NODE	101	1.29157	.1355	.0000	2	2	
NODE	2	1.29060	.2710	.0000	2	2	
NODE	102	1.28967	.4065	.0000	2	2	
NODE	3	1.28857	.5420	.0000	2	2	
NODE	103	1.28798	.6775	.0000	2	2	
NODE	4	1.28755	.8130	.0000	2	2	
NODE	104	1.28705	.9485	.0000	2	2	
NODE	5	1.28665	1.0840	.0000	2	2	
NODE	105	1.28626	1.2610	.0000	2	2	
NODE	6	1.28609	1.4380	.0000	2	2	
NODE	106	1.28595	1.6150	.0000	2	2	
NODE	7	1.28604	1.7920	.0000	2	2	
NODE	107	1.28627	1.9690	.0000	2	2	
NODE	8	1.28640	2.1460	.0000	2	2	
NODE	108	1.28658	2.3230	.0000	2	2	
NODE	9	1.28667	2.5000	.0000	2	2	2
NODE	10	1.29537	.0000	.0000	2	2	2
NODE	11	1.29299	.5420	.0000	2	2	
NODE	12	1.29108	1.0840	.0000	2	2	
NODE	13	1.29037	1.7920	.0000	2	2	
NODE	14	1.29107	2.5000	.0000	2	2	2
NODE	15	1.29868	.0000	.0000	2	2	2
NODE	16	1.29813	.2710	.0000	2	2	
NODE	17	1.29729	.5420	.0000	2	2	
NODE	18	1.29639	.8130	.0000	2	2	
NODE	19	1.29559	1.0840	.0000	2	2	
NODE	20	1.29499	1.4380	.0000	2	2	
NODE	21	1.29479	1.7920	.0000	2	2	
NODE	22	1.29508	2.1460	.0000	2	2	
NODE	23	1.29536	2.5000	.0000	2	2	2
NODE	24	1.30231	.0000	.0000	2	2	2
NODE	25	1.30175	.5420	.0000	2	2	
NODE	26	1.30039	1.0840	.0000	2	2	
NODE	27	1.29948	1.7920	.0000	2	2	
NODE	28	1.29979	2.5000	.0000	2	2	2
NODE	29	1.30594	.0000	.0000	2	2	2
NODE	30	1.30616	.2710	.0000	2	2	
NODE	31	1.30626	.5420	.0000	2	2	
NODE	32	1.30577	.8130	.0000	2	2	
NODE	33	1.30521	1.0840	.0000	2	2	
NODE	34	1.30454	1.4380	.0000	2	2	
NODE	35	1.30414	1.7920	.0000	2	2	
NODE	36	1.30411	2.1460	.0000	2	2	
NODE	37	1.30413	2.5000	.0000	2	2	2
NODE	38	1.30969	.0000	.0000	2	2	2
NODE	39	1.31055	.5420	.0000	2	2	
NODE	40	1.30989	1.0840	.0000	2	2	
NODE	41	1.30869	1.7920	.0000	2	2	
NODE	42	1.30818	2.5000	.0000	2	2	2
NODE	43	1.31387	.0000	.0000	2	2	2
NODE	44	1.31422	.2710	.0000	2	2	
NODE	45	1.31463	.5420	.0000	2	2	

NODE	46	1.31481	.8130	.0000	2	2	
NODE	47	1.31457	1.0840	.0000	2	2	
NODE	48	1.31400	1.4380	.0000	2	2	
NODE	49	1.31336	1.7920	.0000	2	2	
NODE	50	1.31260	2.1460	.0000	2	2	
NODE	51	1.31194	2.5000	.0000	2	2	2
NODE	52	1.31834	.0000	.0000	2	2	2
NODE	53	1.31878	.5420	.0000	2	2	
NODE	54	1.31919	1.0840	.0000	2	2	
NODE	55	1.31809	1.7920	.0000	2	2	
NODE	56	1.31572	2.5000	.0000	2	2	2
NODE	57	1.32284	.0000	.0000	2	2	2
NODE	58	1.32292	.2710	.0000	2	2	
NODE	59	1.32312	.5420	.0000	2	2	
NODE	60	1.32318	.8130	.0000	2	2	
NODE	61	1.32356	1.0840	.0000	2	2	
NODE	505	1.32358	1.2610	.0000	2	2	
NODE	62	1.32333	1.4380	.0000	2	2	
NODE	506	1.32325	1.6150	.0000	2	2	
NODE	63	1.32271	1.7920	.0000	2	2	
NODE	507	1.32166	1.9690	.0000	2	2	
NODE	64	1.32100	2.1460	.0000	2	2	
NODE	508	1.32019	2.3230	.0000	2	2	
NODE	65	1.31972	2.5000	.0000	2	2	2
NODE	66	1.33566	.0000	.0000	2	2	2
NODE	67	1.33579	.5485	.0000	2	2	
NODE	68	1.33589	1.0968	.0000	2	2	
NODE	69	1.34837	.0000	.0000	2	2	2
NODE	70	1.34838	.2775	.0000	2	2	
NODE	71	1.34841	.5550	.0000	2	2	
NODE	72	1.34845	.8322	.0000	2	2	
NODE	73	1.34839	1.1095	.0000	2	2	
NODE	74	1.37335	.0000	.0000	2	2	2
NODE	75	1.37335	.5680	.0000	2	2	
NODE	76	1.37336	1.1350	.0000	2	2	
NODE	77	1.37341	1.8180	.0000	2	2	
NODE	78	1.37341	2.5000	.0000	2	2	2
NODE	79	1.47316	.0000	.0000	2	2	2
NODE	80	1.47319	.5680	.0000	2	2	
NODE	81	1.47323	1.1350	.0000	2	2	
NODE	82	1.47327	1.8180	.0000	2	2	
NODE	83	1.47330	2.5000	.0000	2	2	2
NODE	84	1.57346	.0000	.0000	2	2	2
NODE	85	1.57345	.5680	.0000	2	2	
NODE	86	1.57338	1.1350	.0000	2	2	
NODE	87	1.57330	1.8180	.0000	2	2	
NODE	88	1.57326	2.5000	.0000	2	2	2

EXTRAPOLATED CYCLE 120

		U	V	W
NODE	1	.29773262-03	.00000000	.00000000
NODE	101	-.11715277-03	.00000000	.00000000
NODE	2	-.56838739-03	.00000000	.00000000
NODE	102	-.95100206-03	.00000000	.00000000
NODE	3	-.12959663-02	.00000000	.00000000
NODE	103	-.13257338-02	.00000000	.00000000
NODE	4	-.13318758-02	.00000000	.00000000
NODE	104	-.14076207-02	.00000000	.00000000
NODE	5	-.14247223-02	.00000000	.00000000
NODE	105	-.14414538-02	.00000000	.00000000
NODE	6	-.14449705-02	.00000000	.00000000
NODE	106	-.14257132-02	.00000000	.00000000
NODE	7	-.13847400-02	.00000000	.00000000
NODE	107	-.12979358-02	.00000000	.00000000
NODE	8	-.12223870-02	.00000000	.00000000
NODE	108	-.11265526-02	.00000000	.00000000
NODE	9	-.10604759-02	.00000000	.00000000
NODE	10	-.37229495-03	.00000000	.00000000
NODE	11	-.99225092-03	.00000000	.00000000
NODE	12	-.13643055-02	.00000000	.00000000
NODE	13	-.13751189-02	.00000000	.00000000
NODE	14	-.10447900-02	.00000000	.00000000
NODE	15	-.72961795-03	.00000000	.00000000
NODE	16	-.88535500-03	.00000000	.00000000
NODE	17	-.88128820-03	.00000000	.00000000
NODE	18	-.10395869-02	.00000000	.00000000
NODE	19	-.12268473-02	.00000000	.00000000
NODE	20	-.13202181-02	.00000000	.00000000
NODE	21	-.13465036-02	.00000000	.00000000
NODE	22	-.12275527-02	.00000000	.00000000
NODE	23	-.10838459-02	.00000000	.00000000
NODE	24	-.92376897-03	.00000000	.00000000
NODE	25	-.90987858-03	.00000000	.00000000
NODE	26	-.10910680-02	.00000000	.00000000
NODE	27	-.13107508-02	.00000000	.00000000
NODE	28	-.11695872-02	.00000000	.00000000
NODE	29	-.10823658-02	.00000000	.00000000
NODE	30	-.99078316-03	.00000000	.00000000
NODE	31	-.89838722-03	.00000000	.00000000
NODE	32	-.96331531-03	.00000000	.00000000
NODE	33	-.10364329-02	.00000000	.00000000
NODE	34	-.11494085-02	.00000000	.00000000
NODE	35	-.12634844-02	.00000000	.00000000
NODE	36	-.12594461-02	.00000000	.00000000
NODE	37	-.12512107-02	.00000000	.00000000
NODE	38	-.11639048-02	.00000000	.00000000
NODE	39	-.88975078-03	.00000000	.00000000
NODE	40	-.10020484-02	.00000000	.00000000
NODE	41	-.12274483-02	.00000000	.00000000
NODE	42	-.13427138-02	.00000000	.00000000
NODE	43	-.11601311-02	.00000000	.00000000
NODE	44	-.10542584-02	.00000000	.00000000
NODE	45	-.94316155-03	.00000000	.00000000

NODE	46	-.89000160-03	.00000000	.00000000
NODE	47	-.92471141-03	.00000000	.00000000
NODE	48	-.11053259-02	.00000000	.00000000
NODE	49	-.12093236-02	.00000000	.00000000
NODE	50	-.12411624-02	.00000000	.00000000
NODE	51	-.14330348-02	.00000000	.00000000
NODE	52	-.10997194-02	.00000000	.00000000
NODE	53	-.99387387-03	.00000000	.00000000
NODE	54	-.85145357-03	.00000000	.00000000
NODE	55	-.11239548-02	.00000000	.00000000
NODE	56	-.15857171-02	.00000000	.00000000
NODE	57	-.10521499-02	.00000000	.00000000
NODE	58	-.10287674-02	.00000000	.00000000
NODE	59	-.99446991-03	.00000000	.00000000
NODE	60	-.94476837-03	.00000000	.00000000
NODE	61	-.86020801-03	.00000000	.00000000
NODE	505	-.89975697-03	.00000000	.00000000
NODE	62	-.95234805-03	.00000000	.00000000
NODE	506	-.95469749-03	.00000000	.00000000
NODE	63	-.94507134-03	.00000000	.00000000
NODE	507	-.11183818-02	.00000000	.00000000
NODE	64	-.13342946-02	.00000000	.00000000
NODE	508	-.16074677-02	.00000000	.00000000
NODE	65	-.18949211-02	.00000000	.00000000
NODE	66	-.94498816-03	.00000000	.00000000
NODE	67	-.92227379-03	.00000000	.00000000
NODE	68	-.91582409-03	.00000000	.00000000
NODE	69	-.88336942-03	.00000000	.00000000
NODE	70	-.88741502-03	.00000000	.00000000
NODE	71	-.87478757-03	.00000000	.00000000
NODE	72	-.87349740-03	.00000000	.00000000
NODE	73	-.89449313-03	.00000000	.00000000
NODE	74	-.87828806-03	.00000000	.00000000
NODE	75	-.87801868-03	.00000000	.00000000
NODE	76	-.87545626-03	.00000000	.00000000
NODE	77	-.86764747-03	.00000000	.00000000
NODE	78	-.86547493-03	.00000000	.00000000
NODE	79	-.84589550-03	.00000000	.00000000
NODE	80	-.84365217-03	.00000000	.00000000
NODE	81	-.83636743-03	.00000000	.00000000
NODE	82	-.82845864-03	.00000000	.00000000
NODE	83	-.82533056-03	.00000000	.00000000
NODE	84	-.73610118-03	.00000000	.00000000
NODE	85	-.73904544-03	.00000000	.00000000
NODE	86	-.74843195-03	.00000000	.00000000
NODE	87	-.76202367-03	.00000000	.00000000
NODE	88	-.76829328-03	.00000000	.00000000

EXTRAPOLATED CYCLE 120

		R	THETA	Z			
NODE	1	1.29241	.0000	.0000	2	2	2
NODE	101	1.29150	.1355	.0000	2	2	
NODE	2	1.29030	.2710	.0000	2	2	
NODE	102	1.28917	.4065	.0000	2	2	
NODE	3	1.28789	.5420	.0000	2	2	
NODE	103	1.28728	.6775	.0000	2	2	
NODE	4	1.28686	.8130	.0000	2	2	
NODE	104	1.28632	.9485	.0000	2	2	
NODE	5	1.28593	1.0840	.0000	2	2	
NODE	105	1.28553	1.2610	.0000	2	2	
NODE	6	1.28537	1.4380	.0000	2	2	
NODE	106	1.28524	1.6150	.0000	2	2	
NODE	7	1.28537	1.7920	.0000	2	2	
NODE	107	1.28564	1.9690	.0000	2	2	
NODE	8	1.28582	2.1460	.0000	2	2	
NODE	108	1.28605	2.3230	.0000	2	2	
NODE	9	1.28618	2.5000	.0000	2	2	2
NODE	10	1.29517	.0000	.0000	2	2	2
NODE	11	1.29247	.5420	.0000	2	2	
NODE	12	1.29039	1.0840	.0000	2	2	
NODE	13	1.28970	1.7920	.0000	2	2	
NODE	14	1.29060	2.5000	.0000	2	2	2
NODE	15	1.29828	.0000	.0000	2	2	2
NODE	16	1.29765	.2710	.0000	2	2	
NODE	17	1.29682	.5420	.0000	2	2	
NODE	18	1.29585	.8130	.0000	2	2	
NODE	19	1.29496	1.0840	.0000	2	2	
NODE	20	1.29434	1.4380	.0000	2	2	
NODE	21	1.29414	1.7920	.0000	2	2	
NODE	22	1.29450	2.1460	.0000	2	2	
NODE	23	1.29487	2.5000	.0000	2	2	2
NODE	24	1.30181	.0000	.0000	2	2	2
NODE	25	1.30126	.5420	.0000	2	2	
NODE	26	1.29983	1.0840	.0000	2	2	
NODE	27	1.29885	1.7920	.0000	2	2	
NODE	28	1.29926	2.5000	.0000	2	2	2
NODE	29	1.30535	.0000	.0000	2	2	2
NODE	30	1.30562	.2710	.0000	2	2	
NODE	31	1.30577	.5420	.0000	2	2	
NODE	32	1.30526	.8130	.0000	2	2	
NODE	33	1.30468	1.0840	.0000	2	2	
NODE	34	1.30398	1.4380	.0000	2	2	
NODE	35	1.30355	1.7920	.0000	2	2	
NODE	36	1.30353	2.1460	.0000	2	2	
NODE	37	1.30356	2.5000	.0000	2	2	2
NODE	38	1.30905	.0000	.0000	2	2	2
NODE	39	1.31006	.5420	.0000	2	2	
NODE	40	1.30938	1.0840	.0000	2	2	
NODE	41	1.30812	1.7920	.0000	2	2	
NODE	42	1.30757	2.5000	.0000	2	2	2
NODE	43	1.31322	.0000	.0000	2	2	2
NODE	44	1.31364	.2710	.0000	2	2	
NODE	45	1.31411	.5420	.0000	2	2	

NODE	46	1.31433	.8130	.0000	2	2	
NODE	47	1.31409	1.0840	.0000	2	2	
NODE	48	1.31346	1.4380	.0000	2	2	
NODE	49	1.31280	1.7920	.0000	2	2	
NODE	50	1.31204	2.1460	.0000	2	2	
NODE	51	1.31128	2.5000	.0000	2	2	2
NODE	52	1.31772	.0000	.0000	2	2	2
NODE	53	1.31823	.5420	.0000	2	2	
NODE	54	1.31874	1.0840	.0000	2	2	
NODE	55	1.31759	1.7920	.0000	2	2	
NODE	56	1.31498	2.5000	.0000	2	2	2
NODE	57	1.32225	.0000	.0000	2	2	2
NODE	58	1.32233	.2710	.0000	2	2	
NODE	59	1.32257	.5420	.0000	2	2	
NODE	60	1.32266	.8130	.0000	2	2	
NODE	61	1.32310	1.0840	.0000	2	2	
NODE	505	1.32314	1.2610	.0000	2	2	
NODE	62	1.32288	1.4380	.0000	2	2	
NODE	506	1.32283	1.6150	.0000	2	2	
NODE	63	1.32229	1.7920	.0000	2	2	
NODE	507	1.32117	1.9690	.0000	2	2	
NODE	64	1.32041	2.1460	.0000	2	2	
NODE	508	1.31945	2.3230	.0000	2	2	
NODE	65	1.31884	2.5000	.0000	2	2	2
NODE	66	1.33512	.0000	.0000	2	2	2
NODE	67	1.33526	.5485	.0000	2	2	
NODE	68	1.33537	1.0968	.0000	2	2	
NODE	69	1.34786	.0000	.0000	2	2	2
NODE	70	1.34786	.2775	.0000	2	2	
NODE	71	1.34790	.5550	.0000	2	2	
NODE	72	1.34794	.8322	.0000	2	2	
NODE	73	1.34788	1.1095	.0000	2	2	
NODE	74	1.37284	.0000	.0000	2	2	2
NODE	75	1.37284	.5680	.0000	2	2	
NODE	76	1.37285	1.1350	.0000	2	2	
NODE	77	1.37290	1.8180	.0000	2	2	
NODE	78	1.37290	2.5000	.0000	2	2	2
NODE	79	1.47267	.0000	.0000	2	2	2
NODE	80	1.47270	.5680	.0000	2	2	
NODE	81	1.47274	1.1350	.0000	2	2	
NODE	82	1.47279	1.8180	.0000	2	2	
NODE	83	1.47281	2.5000	.0000	2	2	2
NODE	84	1.57302	.0000	.0000	2	2	2
NODE	85	1.57301	.5680	.0000	2	2	
NODE	86	1.57294	1.1350	.0000	2	2	
NODE	87	1.57285	1.8180	.0000	2	2	
NODE	88	1.57281	2.5000	.0000	2	2	2

EXTRAPOLATED CYCLE 130

		U	V	W
NODE	1	.45089482-03	.00000000	.00000000
NODE	101	-.18381704-03	.00000000	.00000000
NODE	2	-.86832602-03	.00000000	.00000000
NODE	102	-.14513458-02	.00000000	.00000000
NODE	3	-.19756051-02	.00000000	.00000000
NODE	103	-.20176352-02	.00000000	.00000000
NODE	4	-.20226564-02	.00000000	.00000000
NODE	104	-.21310752-02	.00000000	.00000000
NODE	5	-.21514364-02	.00000000	.00000000
NODE	105	-.21699033-02	.00000000	.00000000
NODE	6	-.21677824-02	.00000000	.00000000
NODE	106	-.21324132-02	.00000000	.00000000
NODE	7	-.20626372-02	.00000000	.00000000
NODE	107	-.19220647-02	.00000000	.00000000
NODE	8	-.18011294-02	.00000000	.00000000
NODE	108	-.16514398-02	.00000000	.00000000
NODE	9	-.15496438-02	.00000000	.00000000
NODE	10	-.57560345-03	.00000000	.00000000
NODE	11	-.15184451-02	.00000000	.00000000
NODE	12	-.20593018-02	.00000000	.00000000
NODE	13	-.20448763-02	.00000000	.00000000
NODE	14	-.15189449-02	.00000000	.00000000
NODE	15	-.11261161-02	.00000000	.00000000
NODE	16	-.13615868-02	.00000000	.00000000
NODE	17	-.13527935-02	.00000000	.00000000
NODE	18	-.15831782-02	.00000000	.00000000
NODE	19	-.18517709-02	.00000000	.00000000
NODE	20	-.19746585-02	.00000000	.00000000
NODE	21	-.19973925-02	.00000000	.00000000
NODE	22	-.18002353-02	.00000000	.00000000
NODE	23	-.15744480-02	.00000000	.00000000
NODE	24	-.14278799-02	.00000000	.00000000
NODE	25	-.13990418-02	.00000000	.00000000
NODE	26	-.16475456-02	.00000000	.00000000
NODE	27	-.19376364-02	.00000000	.00000000
NODE	28	-.17015773-02	.00000000	.00000000
NODE	29	-.16757486-02	.00000000	.00000000
NODE	30	-.15334400-02	.00000000	.00000000
NODE	31	-.13853494-02	.00000000	.00000000
NODE	32	-.14720099-02	.00000000	.00000000
NODE	33	-.15671285-02	.00000000	.00000000
NODE	34	-.17127810-02	.00000000	.00000000
NODE	35	-.18594004-02	.00000000	.00000000
NODE	36	-.18403430-02	.00000000	.00000000
NODE	37	-.18225337-02	.00000000	.00000000
NODE	38	-.18064863-02	.00000000	.00000000
NODE	39	-.13775993-02	.00000000	.00000000
NODE	40	-.15190504-02	.00000000	.00000000
NODE	41	-.17996653-02	.00000000	.00000000
NODE	42	-.19588023-02	.00000000	.00000000
NODE	43	-.18066101-02	.00000000	.00000000
NODE	44	-.16418966-02	.00000000	.00000000
NODE	45	-.14651772-02	.00000000	.00000000

NODE	46	-.13716754-02	.00000000	.00000000
NODE	47	-.14057147-02	.00000000	.00000000
NODE	48	-.16360835-02	.00000000	.00000000
NODE	49	-.17672913-02	.00000000	.00000000
NODE	50	-.18019986-02	.00000000	.00000000
NODE	51	-.20918896-02	.00000000	.00000000
NODE	52	-.17183737-02	.00000000	.00000000
NODE	53	-.15478416-02	.00000000	.00000000
NODE	54	-.13003495-02	.00000000	.00000000
NODE	55	-.16326681-02	.00000000	.00000000
NODE	56	-.23184631-02	.00000000	.00000000
NODE	57	-.16482599-02	.00000000	.00000000
NODE	58	-.16125561-02	.00000000	.00000000
NODE	59	-.15525355-02	.00000000	.00000000
NODE	60	-.14659427-02	.00000000	.00000000
NODE	61	-.13202643-02	.00000000	.00000000
NODE	505	-.13416695-02	.00000000	.00000000
NODE	62	-.14004942-02	.00000000	.00000000
NODE	506	-.13819262-02	.00000000	.00000000
NODE	63	-.13554245-02	.00000000	.00000000
NODE	507	-.16086797-02	.00000000	.00000000
NODE	64	-.19320982-02	.00000000	.00000000
NODE	508	-.23450131-02	.00000000	.00000000
NODE	65	-.27845576-02	.00000000	.00000000
NODE	66	-.14917413-02	.00000000	.00000000
NODE	67	-.14533993-02	.00000000	.00000000
NODE	68	-.14276805-02	.00000000	.00000000
NODE	69	-.13992616-02	.00000000	.00000000
NODE	70	-.14045335-02	.00000000	.00000000
NODE	71	-.13858601-02	.00000000	.00000000
NODE	72	-.13823953-02	.00000000	.00000000
NODE	73	-.14101525-02	.00000000	.00000000
NODE	74	-.13851588-02	.00000000	.00000000
NODE	75	-.13851518-02	.00000000	.00000000
NODE	76	-.13823030-02	.00000000	.00000000
NODE	77	-.13717631-02	.00000000	.00000000
NODE	78	-.13688540-02	.00000000	.00000000
NODE	79	-.13361111-02	.00000000	.00000000
NODE	80	-.13328720-02	.00000000	.00000000
NODE	81	-.13222012-02	.00000000	.00000000
NODE	82	-.13104693-02	.00000000	.00000000
NODE	83	-.13060482-02	.00000000	.00000000
NODE	84	-.11703660-02	.00000000	.00000000
NODE	85	-.11747088-02	.00000000	.00000000
NODE	86	-.11887287-02	.00000000	.00000000
NODE	87	-.12090981-02	.00000000	.00000000
NODE	88	-.12184209-02	.00000000	.00000000

EXTRAPOLATED CYCLE 130

		R	THETA	Z			
NODE	1	1.29256	.0000	.0000	2	2	2
NODE	101	1.29144	.1355	.0000	2	2	
NODE	2	1.29000	.2710	.0000	2	2	
NODE	102	1.28867	.4065	.0000	2	2	
NODE	3	1.28721	.5420	.0000	2	2	
NODE	103	1.28659	.6775	.0000	2	2	
NODE	4	1.28617	.8130	.0000	2	2	
NODE	104	1.28560	.9485	.0000	2	2	
NODE	5	1.28520	1.0840	.0000	2	2	
NODE	105	1.28480	1.2610	.0000	2	2	
NODE	6	1.28464	1.4380	.0000	2	2	
NODE	106	1.28454	1.6150	.0000	2	2	
NODE	7	1.28469	1.7920	.0000	2	2	
NODE	107	1.28502	1.9690	.0000	2	2	
NODE	8	1.28524	2.1460	.0000	2	2	
NODE	108	1.28553	2.3230	.0000	2	2	
NODE	9	1.28569	2.5000	.0000	2	2	2
NODE	10	1.29496	.0000	.0000	2	2	2
NODE	11	1.29194	.5420	.0000	2	2	
NODE	12	1.28969	1.0840	.0000	2	2	
NODE	13	1.28904	1.7920	.0000	2	2	
NODE	14	1.29012	2.5000	.0000	2	2	2
NODE	15	1.29788	.0000	.0000	2	2	2
NODE	16	1.29718	.2710	.0000	2	2	
NODE	17	1.29635	.5420	.0000	2	2	
NODE	18	1.29531	.8130	.0000	2	2	
NODE	19	1.29434	1.0840	.0000	2	2	
NODE	20	1.29369	1.4380	.0000	2	2	
NODE	21	1.29349	1.7920	.0000	2	2	
NODE	22	1.29393	2.1460	.0000	2	2	
NODE	23	1.29438	2.5000	.0000	2	2	2
NODE	24	1.30130	.0000	.0000	2	2	2
NODE	25	1.30077	.5420	.0000	2	2	
NODE	26	1.29927	1.0840	.0000	2	2	
NODE	27	1.29822	1.7920	.0000	2	2	
NODE	28	1.29873	2.5000	.0000	2	2	2
NODE	29	1.30475	.0000	.0000	2	2	2
NODE	30	1.30508	.2710	.0000	2	2	
NODE	31	1.30528	.5420	.0000	2	2	
NODE	32	1.30475	.8130	.0000	2	2	
NODE	33	1.30415	1.0840	.0000	2	2	
NODE	34	1.30342	1.4380	.0000	2	2	
NODE	35	1.30295	1.7920	.0000	2	2	
NODE	36	1.30295	2.1460	.0000	2	2	
NODE	37	1.30299	2.5000	.0000	2	2	2
NODE	38	1.30840	.0000	.0000	2	2	2
NODE	39	1.30957	.5420	.0000	2	2	
NODE	40	1.30866	1.0840	.0000	2	2	
NODE	41	1.30755	1.7920	.0000	2	2	
NODE	42	1.30695	2.5000	.0000	2	2	2
NODE	43	1.31257	.0000	.0000	2	2	2
NODE	44	1.31305	.2710	.0000	2	2	
NODE	45	1.31358	.5420	.0000	2	2	

NODE	46	1.31385	.8130	.0000	2	2	
NODE	47	1.31360	1.0840	.0000	2	2	
NODE	48	1.31293	1.4380	.0000	2	2	
NODE	49	1.31224	1.7920	.0000	2	2	
NODE	50	1.31148	2.1460	.0000	2	2	
NODE	51	1.31062	2.5000	.0000	2	2	2
NODE	52	1.31710	.0000	.0000	2	2	2
NODE	53	1.31767	.5420	.0000	2	2	
NODE	54	1.31829	1.0840	.0000	2	2	
NODE	55	1.31708	1.7920	.0000	2	2	
NODE	56	1.31425	2.5000	.0000	2	2	2
NODE	57	1.32165	.0000	.0000	2	2	2
NODE	58	1.32175	.2710	.0000	2	2	
NODE	59	1.32201	.5420	.0000	2	2	
NODE	60	1.32213	.8130	.0000	2	2	
NODE	61	1.32264	1.0840	.0000	2	2	
NODE	505	1.32270	1.2610	.0000	2	2	
NODE	62	1.32243	1.4380	.0000	2	2	
NODE	506	1.32240	1.6150	.0000	2	2	
NODE	63	1.32188	1.7920	.0000	2	2	
NODE	507	1.32068	1.9690	.0000	2	2	
NODE	64	1.31981	2.1460	.0000	2	2	
NODE	508	1.31871	2.3230	.0000	2	2	
NODE	65	1.31795	2.5000	.0000	2	2	2
NODE	66	1.33457	.0000	.0000	2	2	2
NODE	67	1.33473	.5485	.0000	2	2	
NODE	68	1.33486	1.0968	.0000	2	2	
NODE	69	1.34734	.0000	.0000	2	2	2
NODE	70	1.34735	.2775	.0000	2	2	
NODE	71	1.34738	.5550	.0000	2	2	
NODE	72	1.34743	.8322	.0000	2	2	
NODE	73	1.34736	1.1095	.0000	2	2	
NODE	74	1.37233	.0000	.0000	2	2	2
NODE	75	1.37233	.5680	.0000	2	2	
NODE	76	1.37235	1.1350	.0000	2	2	
NODE	77	1.37240	1.8180	.0000	2	2	
NODE	78	1.37240	2.5000	.0000	2	2	2
NODE	79	1.47218	.0000	.0000	2	2	2
NODE	80	1.47221	.5680	.0000	2	2	
NODE	81	1.47226	1.1350	.0000	2	2	
NODE	82	1.47231	1.8180	.0000	2	2	
NODE	83	1.47233	2.5000	.0000	2	2	2
NODE	84	1.57259	.0000	.0000	2	2	2
NODE	85	1.57258	.5680	.0000	2	2	
NODE	86	1.57250	1.1350	.0000	2	2	
NODE	87	1.57240	1.8180	.0000	2	2	
NODE	88	1.57236	2.5000	.0000	2	2	2

EXTRAPOLATED CYCLE 140

		U	V	W
NODE	1	.60405702-03	.00000000	.00000000
NODE	101	-.25048129-03	.00000000	.00000000
NODE	2	-.11682647-02	.00000000	.00000000
NODE	102	-.19516895-02	.00000000	.00000000
NODE	3	-.26552440-02	.00000000	.00000000
NODE	103	-.27095363-02	.00000000	.00000000
NODE	4	-.27134370-02	.00000000	.00000000
NODE	104	-.28545297-02	.00000000	.00000000
NODE	5	-.28781504-02	.00000000	.00000000
NODE	105	-.28983527-02	.00000000	.00000000
NODE	6	-.28905942-02	.00000000	.00000000
NODE	106	-.28391131-02	.00000000	.00000000
NODE	7	-.27405345-02	.00000000	.00000000
NODE	107	-.25461935-02	.00000000	.00000000
NODE	8	-.23798719-02	.00000000	.00000000
NODE	108	-.21763269-02	.00000000	.00000000
NODE	9	-.20388117-02	.00000000	.00000000
NODE	10	-.77891193-03	.00000000	.00000000
NODE	11	-.20446392-02	.00000000	.00000000
NODE	12	-.27542982-02	.00000000	.00000000
NODE	13	-.27146338-02	.00000000	.00000000
NODE	14	-.19930999-02	.00000000	.00000000
NODE	15	-.15226143-02	.00000000	.00000000
NODE	16	-.18378186-02	.00000000	.00000000
NODE	17	-.18242989-02	.00000000	.00000000
NODE	18	-.21267694-02	.00000000	.00000000
NODE	19	-.24766945-02	.00000000	.00000000
NODE	20	-.26290988-02	.00000000	.00000000
NODE	21	-.26482814-02	.00000000	.00000000
NODE	22	-.23729180-02	.00000000	.00000000
NODE	23	-.20650501-02	.00000000	.00000000
NODE	24	-.19319908-02	.00000000	.00000000
NODE	25	-.18882050-02	.00000000	.00000000
NODE	26	-.22040232-02	.00000000	.00000000
NODE	27	-.25645220-02	.00000000	.00000000
NODE	28	-.22335674-02	.00000000	.00000000
NODE	29	-.22691315-02	.00000000	.00000000
NODE	30	-.20760968-02	.00000000	.00000000
NODE	31	-.18723116-02	.00000000	.00000000
NODE	32	-.19807045-02	.00000000	.00000000
NODE	33	-.20978240-02	.00000000	.00000000
NODE	34	-.22761535-02	.00000000	.00000000
NODE	35	-.24553165-02	.00000000	.00000000
NODE	36	-.24212399-02	.00000000	.00000000
NODE	37	-.23938565-02	.00000000	.00000000
NODE	38	-.24490678-02	.00000000	.00000000
NODE	39	-.18654477-02	.00000000	.00000000
NODE	40	-.20360524-02	.00000000	.00000000
NODE	41	-.23718823-02	.00000000	.00000000
NODE	42	-.25748909-02	.00000000	.00000000
NODE	43	-.24530892-02	.00000000	.00000000
NODE	44	-.22295347-02	.00000000	.00000000
NODE	45	-.19871928-02	.00000000	.00000000

NODE	46	-.18533492-02	.00000000	.00000000
NODE	47	-.18867179-02	.00000000	.00000000
NODE	48	-.21668411-02	.00000000	.00000000
NODE	49	-.23252591-02	.00000000	.00000000
NODE	50	-.23628348-02	.00000000	.00000000
NODE	51	-.27507445-02	.00000000	.00000000
NODE	52	-.23370280-02	.00000000	.00000000
NODE	53	-.21018093-02	.00000000	.00000000
NODE	54	-.17492454-02	.00000000	.00000000
NODE	55	-.21413813-02	.00000000	.00000000
NODE	56	-.30512090-02	.00000000	.00000000
NODE	57	-.22443699-02	.00000000	.00000000
NODE	58	-.21963448-02	.00000000	.00000000
NODE	59	-.21106009-02	.00000000	.00000000
NODE	60	-.19871170-02	.00000000	.00000000
NODE	61	-.17803205-02	.00000000	.00000000
NODE	505	-.17835821-02	.00000000	.00000000
NODE	62	-.18486404-02	.00000000	.00000000
NODE	506	-.18091549-02	.00000000	.00000000
NODE	63	-.17657776-02	.00000000	.00000000
NODE	507	-.20989775-02	.00000000	.00000000
NODE	64	-.25299017-02	.00000000	.00000000
NODE	508	-.30825584-02	.00000000	.00000000
NODE	65	-.36741942-02	.00000000	.00000000
NODE	66	-.20384943-02	.00000000	.00000000
NODE	67	-.19845248-02	.00000000	.00000000
NODE	68	-.19395369-02	.00000000	.00000000
NODE	69	-.19151538-02	.00000000	.00000000
NODE	70	-.19216518-02	.00000000	.00000000
NODE	71	-.18969327-02	.00000000	.00000000
NODE	72	-.18912933-02	.00000000	.00000000
NODE	73	-.19258118-02	.00000000	.00000000
NODE	74	-.18920295-02	.00000000	.00000000
NODE	75	-.18922848-02	.00000000	.00000000
NODE	76	-.18891497-02	.00000000	.00000000
NODE	77	-.18758787-02	.00000000	.00000000
NODE	78	-.18722331-02	.00000000	.00000000
NODE	79	-.18263267-02	.00000000	.00000000
NODE	80	-.18220919-02	.00000000	.00000000
NODE	81	-.18080349-02	.00000000	.00000000
NODE	82	-.17924799-02	.00000000	.00000000
NODE	83	-.17867659-02	.00000000	.00000000
NODE	84	-.16046308-02	.00000000	.00000000
NODE	85	-.16103722-02	.00000000	.00000000
NODE	86	-.16290254-02	.00000000	.00000000
NODE	87	-.16561725-02	.00000000	.00000000
NODE	88	-.16685484-02	.00000000	.00000000

EXTRAPOLATED CYCLE 140

		R	THETA	Z			
NODE	1	1.29271	.0000	.0000	2	2	2
NODE	101	1.29137	.1355	.0000	2	2	
NODE	2	1.28970	.2710	.0000	2	2	
NODE	102	1.28817	.4065	.0000	2	2	
NODE	3	1.28653	.5420	.0000	2	2	
NODE	103	1.28590	.6775	.0000	2	2	
NODE	4	1.28548	.8130	.0000	2	2	
NODE	104	1.28488	.9485	.0000	2	2	
NODE	5	1.28447	1.0840	.0000	2	2	
NODE	105	1.28407	1.2610	.0000	2	2	
NODE	6	1.28392	1.4380	.0000	2	2	
NODE	106	1.28383	1.6150	.0000	2	2	
NODE	7	1.28401	1.7920	.0000	2	2	
NODE	107	1.28439	1.9690	.0000	2	2	
NODE	8	1.28466	2.1460	.0000	2	2	
NODE	108	1.28500	2.3230	.0000	2	2	
NODE	9	1.28520	2.5000	.0000	2	2	2
NODE	10	1.29476	.0000	.0000	2	2	2
NODE	11	1.29142	.5420	.0000	2	2	
NODE	12	1.28900	1.0840	.0000	2	2	
NODE	13	1.28837	1.7920	.0000	2	2	
NODE	14	1.28965	2.5000	.0000	2	2	2
NODE	15	1.29749	.0000	.0000	2	2	2
NODE	16	1.29670	.2710	.0000	2	2	
NODE	17	1.29588	.5420	.0000	2	2	
NODE	18	1.29476	.8130	.0000	2	2	
NODE	19	1.29371	1.0840	.0000	2	2	
NODE	20	1.29303	1.4380	.0000	2	2	
NODE	21	1.29284	1.7920	.0000	2	2	
NODE	22	1.29336	2.1460	.0000	2	2	
NODE	23	1.29388	2.5000	.0000	2	2	2
NODE	24	1.30080	.0000	.0000	2	2	2
NODE	25	1.30028	.5420	.0000	2	2	
NODE	26	1.29872	1.0840	.0000	2	2	
NODE	27	1.29760	1.7920	.0000	2	2	
NODE	28	1.29820	2.5000	.0000	2	2	2
NODE	29	1.30416	.0000	.0000	2	2	2
NODE	30	1.30453	.2710	.0000	2	2	
NODE	31	1.30480	.5420	.0000	2	2	
NODE	32	1.30424	.8130	.0000	2	2	
NODE	33	1.30362	1.0840	.0000	2	2	
NODE	34	1.30285	1.4380	.0000	2	2	
NODE	35	1.30235	1.7920	.0000	2	2	
NODE	36	1.30237	2.1460	.0000	2	2	
NODE	37	1.30242	2.5000	.0000	2	2	2
NODE	38	1.30776	.0000	.0000	2	2	2
NODE	39	1.30908	.5420	.0000	2	2	
NODE	40	1.30834	1.0840	.0000	2	2	
NODE	41	1.30698	1.7920	.0000	2	2	
NODE	42	1.30634	2.5000	.0000	2	2	2
NODE	43	1.31193	.0000	.0000	2	2	2
NODE	44	1.31246	.2710	.0000	2	2	
NODE	45	1.31306	.5420	.0000	2	2	

NODE	46	1.31337	.8130	.0000	2	2	
NODE	47	1.31312	1.0840	.0000	2	2	
NODE	48	1.31240	1.4380	.0000	2	2	
NODE	49	1.31168	1.7920	.0000	2	2	
NODE	50	1.31092	2.1460	.0000	2	2	
NODE	51	1.30996	2.5000	.0000	2	2	2
NODE	52	1.31648	.0000	.0000	2	2	2
NODE	53	1.31712	.5420	.0000	2	2	
NODE	54	1.31784	1.0840	.0000	2	2	
NODE	55	1.31657	1.7920	.0000	2	2	
NODE	56	1.31352	2.5000	.0000	2	2	2
NODE	57	1.32106	.0000	.0000	2	2	2
NODE	58	1.32116	.2710	.0000	2	2	
NODE	59	1.32145	.5420	.0000	2	2	
NODE	60	1.32161	.8130	.0000	2	2	
NODE	61	1.32218	1.0840	.0000	2	2	
NODE	505	1.32226	1.2610	.0000	2	2	
NODE	62	1.32198	1.4380	.0000	2	2	
NODE	506	1.32197	1.6150	.0000	2	2	
NODE	63	1.32147	1.7920	.0000	2	2	
NODE	507	1.32019	1.9690	.0000	2	2	
NODE	64	1.31921	2.1460	.0000	2	2	
NODE	508	1.31798	2.3230	.0000	2	2	
NODE	65	1.31706	2.5000	.0000	2	2	2
NODE	66	1.33402	.0000	.0000	2	2	2
NODE	67	1.33420	.5485	.0000	2	2	
NODE	68	1.33435	1.0968	.0000	2	2	
NODE	69	1.34682	.0000	.0000	2	2	2
NODE	70	1.34683	.2775	.0000	2	2	
NODE	71	1.34687	.5550	.0000	2	2	
NODE	72	1.34692	.8322	.0000	2	2	
NODE	73	1.34684	1.1095	.0000	2	2	
NODE	74	1.37183	.0000	.0000	2	2	2
NODE	75	1.37183	.5680	.0000	2	2	
NODE	76	1.37184	1.1350	.0000	2	2	
NODE	77	1.37189	1.8180	.0000	2	2	
NODE	78	1.37190	2.5000	.0000	2	2	2
NODE	79	1.47169	.0000	.0000	2	2	2
NODE	80	1.47172	.5680	.0000	2	2	
NODE	81	1.47177	1.1350	.0000	2	2	
NODE	82	1.47183	1.8180	.0000	2	2	
NODE	83	1.47185	2.5000	.0000	2	2	2
NODE	84	1.57216	.0000	.0000	2	2	2
NODE	85	1.57214	.5680	.0000	2	2	
NODE	86	1.57206	1.1350	.0000	2	2	
NODE	87	1.57195	1.8180	.0000	2	2	
NODE	88	1.57191	2.5000	.0000	2	2	2

EXTRAPOLATED CYCLE 150

		U	V	W
NODE	1	.75721924-03	.00000000	.00000000
NODE	101	-.31714556-03	.00000000	.00000000
NODE	2	-.14682033-02	.00000000	.00000000
NODE	102	-.24520333-02	.00000000	.00000000
NODE	3	-.33348829-02	.00000000	.00000000
NODE	103	-.34014377-02	.00000000	.00000000
NODE	4	-.34042175-02	.00000000	.00000000
NODE	104	-.35779842-02	.00000000	.00000000
NODE	5	-.36048646-02	.00000000	.00000000
NODE	105	-.36268022-02	.00000000	.00000000
NODE	6	-.36134061-02	.00000000	.00000000
NODE	106	-.35458131-02	.00000000	.00000000
NODE	7	-.34184319-02	.00000000	.00000000
NODE	107	-.31703225-02	.00000000	.00000000
NODE	8	-.29586144-02	.00000000	.00000000
NODE	108	-.27012142-02	.00000000	.00000000
NODE	9	-.25279796-02	.00000000	.00000000
NODE	10	-.98222043-03	.00000000	.00000000
NODE	11	-.25708333-02	.00000000	.00000000
NODE	12	-.34492946-02	.00000000	.00000000
NODE	13	-.33843914-02	.00000000	.00000000
NODE	14	-.24672548-02	.00000000	.00000000
NODE	15	-.19191125-02	.00000000	.00000000
NODE	16	-.23140504-02	.00000000	.00000000
NODE	17	-.22958042-02	.00000000	.00000000
NODE	18	-.26703606-02	.00000000	.00000000
NODE	19	-.31016183-02	.00000000	.00000000
NODE	20	-.32835392-02	.00000000	.00000000
NODE	21	-.32991704-02	.00000000	.00000000
NODE	22	-.29456007-02	.00000000	.00000000
NODE	23	-.25556522-02	.00000000	.00000000
NODE	24	-.24361018-02	.00000000	.00000000
NODE	25	-.23773682-02	.00000000	.00000000
NODE	26	-.27605009-02	.00000000	.00000000
NODE	27	-.31914077-02	.00000000	.00000000
NODE	28	-.27655575-02	.00000000	.00000000
NODE	29	-.28625143-02	.00000000	.00000000
NODE	30	-.26187536-02	.00000000	.00000000
NODE	31	-.23592738-02	.00000000	.00000000
NODE	32	-.24893991-02	.00000000	.00000000
NODE	33	-.26285195-02	.00000000	.00000000
NODE	34	-.28395260-02	.00000000	.00000000
NODE	35	-.30512325-02	.00000000	.00000000
NODE	36	-.30021368-02	.00000000	.00000000
NODE	37	-.29651795-02	.00000000	.00000000
NODE	38	-.30916494-02	.00000000	.00000000
NODE	39	-.23532963-02	.00000000	.00000000
NODE	40	-.25530544-02	.00000000	.00000000
NODE	41	-.29440994-02	.00000000	.00000000
NODE	42	-.31909794-02	.00000000	.00000000
NODE	43	-.30995684-02	.00000000	.00000000
NODE	44	-.29171728-02	.00000000	.00000000
NODE	45	-.25092084-02	.00000000	.00000000

NODE	46	-.23350231-02	.00000000	.00000000
NODE	47	-.23677212-02	.00000000	.00000000
NODE	48	-.26975988-02	.00000000	.00000000
NODE	49	-.28832268-02	.00000000	.00000000
NODE	50	-.29236710-02	.00000000	.00000000
NODE	51	-.34095993-02	.00000000	.00000000
NODE	52	-.29556823-02	.00000000	.00000000
NODE	53	-.26557770-02	.00000000	.00000000
NODE	54	-.21981414-02	.00000000	.00000000
NODE	55	-.26500945-02	.00000000	.00000000
NODE	56	-.37839550-02	.00000000	.00000000
NODE	57	-.28404801-02	.00000000	.00000000
NODE	58	-.27801335-02	.00000000	.00000000
NODE	59	-.26686665-02	.00000000	.00000000
NODE	60	-.25082913-02	.00000000	.00000000
NODE	61	-.22403768-02	.00000000	.00000000
NODE	505	-.22254947-02	.00000000	.00000000
NODE	62	-.22967867-02	.00000000	.00000000
NODE	506	-.22363836-02	.00000000	.00000000
NODE	63	-.21761308-02	.00000000	.00000000
NODE	507	-.25892754-02	.00000000	.00000000
NODE	64	-.31277052-02	.00000000	.00000000
NODE	508	-.38201038-02	.00000000	.00000000
NODE	65	-.45638308-02	.00000000	.00000000
NODE	66	-.25852474-02	.00000000	.00000000
NODE	67	-.25156502-02	.00000000	.00000000
NODE	68	-.24513934-02	.00000000	.00000000
NODE	69	-.24310459-02	.00000000	.00000000
NODE	70	-.24387703-02	.00000000	.00000000
NODE	71	-.24090053-02	.00000000	.00000000
NODE	72	-.24001912-02	.00000000	.00000000
NODE	73	-.24414712-02	.00000000	.00000000
NODE	74	-.23989003-02	.00000000	.00000000
NODE	75	-.23994179-02	.00000000	.00000000
NODE	76	-.23959964-02	.00000000	.00000000
NODE	77	-.23799943-02	.00000000	.00000000
NODE	78	-.23756122-02	.00000000	.00000000
NODE	79	-.23165423-02	.00000000	.00000000
NODE	80	-.23113118-02	.00000000	.00000000
NODE	81	-.22938686-02	.00000000	.00000000
NODE	82	-.22744906-02	.00000000	.00000000
NODE	83	-.22674836-02	.00000000	.00000000
NODE	84	-.20388957-02	.00000000	.00000000
NODE	85	-.20460356-02	.00000000	.00000000
NODE	86	-.20693221-02	.00000000	.00000000
NODE	87	-.21032469-02	.00000000	.00000000
NODE	88	-.21186761-02	.00000000	.00000000

EXTRAPOLATED CYCLE 150

		R	THETA	Z			
NODE	1	1.29287	.0000	.0000	2	2	2
NODE	101	1.29130	.1355	.0000	2	2	
NODE	2	1.28940	.2710	.0000	2	2	
NODE	102	1.28767	.4065	.0000	2	2	
NODE	3	1.28586	.5420	.0000	2	2	
NODE	103	1.28521	.6775	.0000	2	2	
NODE	4	1.28479	.8130	.0000	2	2	
NODE	104	1.28415	.9485	.0000	2	2	
NODE	5	1.28375	1.0840	.0000	2	2	
NODE	105	1.28334	1.2610	.0000	2	2	
NODE	6	1.28320	1.4380	.0000	2	2	
NODE	106	1.28312	1.6150	.0000	2	2	
NODE	7	1.28333	1.7920	.0000	2	2	
NODE	107	1.28377	1.9690	.0000	2	2	
NODE	8	1.28408	2.1460	.0000	2	2	
NODE	108	1.28448	2.3230	.0000	2	2	
NODE	9	1.28471	2.5000	.0000	2	2	2
NODE	10	1.29456	.0000	.0000	2	2	2
NODE	11	1.29089	.5420	.0000	2	2	
NODE	12	1.28830	1.0840	.0000	2	2	
NODE	13	1.28770	1.7920	.0000	2	2	
NODE	14	1.28517	2.5000	.0000	2	2	2
NODE	15	1.29709	.0000	.0000	2	2	2
NODE	16	1.29623	.2710	.0000	2	2	
NODE	17	1.29540	.5420	.0000	2	2	
NODE	18	1.29422	.8130	.0000	2	2	
NODE	19	1.29309	1.0840	.0000	2	2	
NODE	20	1.29238	1.4380	.0000	2	2	
NODE	21	1.29219	1.7920	.0000	2	2	
NODE	22	1.29278	2.1460	.0000	2	2	
NODE	23	1.29339	2.5000	.0000	2	2	2
NODE	24	1.30029	.0000	.0000	2	2	2
NODE	25	1.29979	.5420	.0000	2	2	
NODE	26	1.29816	1.0840	.0000	2	2	
NODE	27	1.29697	1.7920	.0000	2	2	
NODE	28	1.29766	2.5000	.0000	2	2	2
NODE	29	1.30357	.0000	.0000	2	2	2
NODE	30	1.30399	.2710	.0000	2	2	
NODE	31	1.30431	.5420	.0000	2	2	
NODE	32	1.30373	.8130	.0000	2	2	
NODE	33	1.30309	1.0840	.0000	2	2	
NODE	34	1.30229	1.4380	.0000	2	2	
NODE	35	1.30176	1.7920	.0000	2	2	
NODE	36	1.30179	2.1460	.0000	2	2	
NODE	37	1.30184	2.5000	.0000	2	2	2
NODE	38	1.30712	.0000	.0000	2	2	2
NODE	39	1.30860	.5420	.0000	2	2	
NODE	40	1.30783	1.0840	.0000	2	2	
NODE	41	1.30641	1.7920	.0000	2	2	
NODE	42	1.30572	2.5000	.0000	2	2	2
NODE	43	1.31128	.0000	.0000	2	2	2
NODE	44	1.31187	.2710	.0000	2	2	
NODE	45	1.31254	.5420	.0000	2	2	

NODE	46	1.31288	.8130	.0000	2	2	
NODE	47	1.31264	1.0840	.0000	2	2	
NODE	48	1.31187	1.4380	.0000	2	2	
NODE	49	1.31113	1.7920	.0000	2	2	
NODE	50	1.31036	2.1460	.0000	2	2	
NODE	51	1.30930	2.5000	.0000	2	2	2
NODE	52	1.31586	.0000	.0000	2	2	2
NODE	53	1.31656	.5420	.0000	2	2	
NODE	54	1.31739	1.0840	.0000	2	2	
NODE	55	1.31606	1.7920	.0000	2	2	
NODE	56	1.31279	2.5000	.0000	2	2	2
NODE	57	1.32046	.0000	.0000	2	2	2
NODE	58	1.32058	.2710	.0000	2	2	
NODE	59	1.32089	.5420	.0000	2	2	
NODE	60	1.32109	.8130	.0000	2	2	
NODE	61	1.32172	1.0840	.0000	2	2	
NODE	505	1.32181	1.2610	.0000	2	2	
NODE	62	1.32153	1.4380	.0000	2	2	
NODE	506	1.32154	1.6150	.0000	2	2	
NODE	63	1.32106	1.7920	.0000	2	2	
NODE	507	1.31970	1.9690	.0000	2	2	
NODE	64	1.31861	2.1460	.0000	2	2	
NODE	508	1.31724	2.3230	.0000	2	2	
NODE	65	1.31617	2.5000	.0000	2	2	2
NODE	66	1.33347	.0000	.0000	2	2	2
NODE	67	1.33366	.5485	.0000	2	2	
NODE	68	1.33384	1.0968	.0000	2	2	
NODE	69	1.34631	.0000	.0000	2	2	2
NODE	70	1.34631	.2775	.0000	2	2	
NODE	71	1.34636	.5550	.0000	2	2	
NODE	72	1.34641	.8322	.0000	2	2	
NODE	73	1.34633	1.1095	.0000	2	2	
NODE	74	1.37132	.0000	.0000	2	2	2
NODE	75	1.37132	.5680	.0000	2	2	
NODE	76	1.37133	1.1350	.0000	2	2	
NODE	77	1.37139	1.8180	.0000	2	2	
NODE	78	1.37139	2.5000	.0000	2	2	2
NODE	79	1.47120	.0000	.0000	2	2	2
NODE	80	1.47123	.5680	.0000	2	2	
NODE	81	1.47129	1.1350	.0000	2	2	
NODE	82	1.47135	1.8180	.0000	2	2	
NODE	83	1.47137	2.5000	.0000	2	2	2
NODE	84	1.57172	.0000	.0000	2	2	2
NODE	85	1.57170	.5680	.0000	2	2	
NODE	86	1.57162	1.1350	.0000	2	2	
NODE	87	1.57151	1.8180	.0000	2	2	
NODE	88	1.57146	2.5000	.0000	2	2	2

```
@ELT,DIL DATA/PLOTTER
ELT 8R1 S7401C 11/25/80 20:18:10 (->0)
 1.   00   OFHC CYLINDER 34 THRUST CHAMBER
 2.   00    100    1    1    3
 3.   00   QUAD   1    1    1    2    1    3   17   15                        3
 4.   00   CONT 101    2  102    0   11    0    0   16    0    0   10    0
 5.   00   QUAD   2    1    1    2    3    5   19   17                        3
 6.   00   CONT 103    4  104    0   12    0    0   18    0    0   11    0
 7.   00   QUAD   3    1    1    2    5    7   21   19                        3
 8.   00   CONT 105    6  106    0   13    0    0   20    0    0   12    0
 9.   00   QUAD   4    1    1    2    7    9   23   21                        3
10.   00   CONT 107    8  108    0   14    0    0   22    0    0   13    0
11.   00   QUAD   5    1    1    1   15   17   31   29                        1
12.   00   CONT  16   25   30   24
13.   00   QUAD   6    1    1    1   17   19   33   31                        1
14.   00   CONT  18   26   32   25
15.   00   QUAD   7    1    1    1   19   21   35   33                        1
16.   00   CONT  20   27   34   26
17.   00   QUAD   8    1    1    1   21   23   37   35                        1
18.   00   CONT  22   28   36   27
19.   00   QUAD   9    1    1    1   29   31   45   43                        1
20.   00   CONT  30   39   44   38
21.   00   QUAD  10    1    1    1   31   33   47   45                        1
22.   00   CONT  32   40   46   39
23.   00   QUAD  11    1    1    1   33   35   49   47                        1
24.   00   CONT  34   41   48   40
25.   00   QUAD  12    1    1    1   35   37   51   49                        1
26.   00   CONT  36   42   50   41
27.   00   QUAD  13    1    1    1   43   45   59   57                        1
28.   00   CONT  44   53   58   52
29.   00   QUAD  14    1    1    1   45   47   61   59                        1
30.   00   CONT  46   54   60   53
31.   00   QUAD  15    1    1    2   47   49   63   61                        3
32.   00   CONT   0   48    0    0   55    0  506   62  505    0   54    0
33.   00   QUAD  16    1    1    2   49   51   65   63                        3
34.   00   CONT   0   50    0    0   56    0  508   64  507    0   55    0
35.   00   QUAD  17    1    1    1   57   59   71   69                        1
36.   00   CONT  58   67   70   66
37.   00   QUAD  18    1    1    1   59   61   73   71                        1
38.   00   CONT  60   68   72   67
39.   00   QUAD  19    1    1    1   69   71   75   74                        1
40.   00   CONT  70    0    0    0
41.   00   QUAD  20    1    1    1   71   73   76   75                        1
42.   00   CONT  72    0    0    0
43.   00   QUAD  21    2    1    1   74   75   80   79                        0
44.   00   QUAD  22    2    1    1   75   76   81   80                        0
45.   00   QUAD  23    2    1    1   76   77   82   81                        0
46.   00   QUAD  24    2    1    1   77   78   83   82                        0
47.   00   QUAD  25    2    1    1   79   80   85   84                        0
48.   00   QUAD  26    2    1    1   80   81   86   85                        0
49.   00   QUAD  27    2    1    1   81   82   87   86                        0
50.   00   QUAD  28    2    1    1   82   83   88   87                        0
51.   00   END
52.   00   UNDEFORMED MODEL GRID
53.   00   NODE     1            1.3    0.        0.        2    2    2
54.   00   NODE   101            1.3    0.1355    0.        2    2
55.   00   NODE     2            1.3    0.271     0.        2    2
```

LOCKHEED-HUNTSVILLE RESEARCH & ENGINEERING CENTER

56.	00	NODE	102	1.3	0.4065	0.	2	2	
57.	00	NODE	3	1.3	0.542	0.	2	2	
58.	00	NODE	103	1.3	0.6775	0.	2	2	
59.	00	NODE	4	1.3	0.813	0.	2	2	
60.	00	NODE	104	1.3	0.9485	0.	2	2	
61.	00	NODE	5	1.3	1.084	0.	2	2	
62.	00	NODE	105	1.3	1.2610	0.	2	2	
63.	00	NODE	6	1.3	1.438	0.	2	2	
64.	00	NODE	106	1.3	1.6150	0.	2	2	
65.	00	NODE	7	1.3	1.792	0.	2	2	
66.	00	NODE	107	1.3	1.9690	0.	2	2	
67.	00	NODE	8	1.3	2.146	0.	2	2	
68.	00	NODE	108	1.3	2.3230	0.	2	2	
69.	00	NODE	9	1.3	2.5	0.	2	2	2
70.	00	NODE	10	1.30425	0.	0.	2	2	2
71.	00	NODE	11	1.30425	0.542	0.	2	2	
72.	00	NODE	12	1.30425	1.084	0.	2	2	
73.	00	NODE	13	1.30425	1.792	0.	2	2	
74.	00	NODE	14	1.30425	2.5	0.	2	2	2
75.	00	NODE	15	1.3085	0.	0.	2	2	2
76.	00	NODE	16	1.3085	0.271	0.	2	2	
77.	00	NODE	17	1.3085	0.542	0.	2	2	
78.	00	NODE	18	1.3085	0.813	0.	2	2	
79.	00	NODE	19	1.3085	1.084	0.	2	2	
80.	00	NODE	20	1.3085	1.438	0.	2	2	
81.	00	NODE	21	1.3085	1.792	0.	2	2	
82.	00	NODE	22	1.3085	2.146	0.	2	2	
83.	00	NODE	23	1.3085	2.5	0.	2	2	2
84.	00	NODE	24	1.313	0.	0.	2	2	2
85.	00	NODE	25	1.313	0.542	0.	2	2	
86.	00	NODE	26	1.313	1.084	0.	2	2	
87.	00	NODE	27	1.313	1.792	0.	2	2	
88.	00	NODE	28	1.313	2.5	0.	2	2	2
89.	00	NODE	29	1.3175	0.	0.	2	2	2
90.	00	NODE	30	1.3175	0.271	0.	2	2	
91.	00	NODE	31	1.3175	0.542	0.	2	2	
92.	00	NODE	32	1.3175	0.313	0.	2	2	
93.	00	NODE	33	1.3175	1.084	0.	2	2	
94.	00	NODE	34	1.3175	1.438	0.	2	2	
95.	00	NODE	35	1.3175	1.792	0.	2	2	
96.	00	NODE	36	1.3175	2.146	0.	2	2	
97.	00	NODE	37	1.3175	2.5	0.	2	2	2
98.	00	NODE	38	1.32188	0.	0.	2	2	2
99.	00	NODE	39	1.32188	0.542	0.	2	2	
100.	00	NODE	40	1.32188	1.084	0.	2	2	
101.	00	NODE	41	1.32188	1.792	0.	2	2	
102.	00	NODE	42	1.32188	2.5	0.	2	2	2
103.	00	NODE	43	1.32625	0.	0.	2	2	2
104.	00	NODE	44	1.32625	0.271	0.	2	2	
105.	00	NODE	45	1.32625	0.542	0.	2	2	
106.	00	NODE	46	1.32625	0.813	0.	2	2	
107.	00	NODE	47	1.32625	1.084	0.	2	2	
108.	00	NODE	48	1.32625	1.438	0.	2	2	
109.	00	NODE	49	1.32625	1.792	0.	2	2	
110.	00	NODE	50	1.32625	2.146	0.	2	2	
111.	00	NODE	51	1.32625	2.5	0.	2	2	2
112.	00	NODE	52	1.33062	0.	0.	2	2	2

113.	00	NODE	53	1.33062	0.542	0.	2	2	
114.	00	NODE	54	1.33062	1.084	0.	2	2	
115.	00	NODE	55	1.33062	1.792	0.	2	2	
116.	00	NODE	56	1.33062	2.5	0.	2	2	2
117.	00	NODE	57	1.335	0.	0.	2	2	2
118.	00	NODE	58	1.335	0.271	0.	2	2	
119.	00	NODE	59	1.335	0.542	0.	2	2	
120.	00	NODE	60	1.335	0.813	0.	2	2	
121.	00	NODE	61	1.335	1.084	0.	2	2	
122.	00	NODE	505	1.335	1.2610	0.	2	2	
123.	00	NODE	62	1.335	1.438	0.	2	2	
124.	00	NODE	506	1.335	1.6150	0.	2	2	
125.	00	NODE	63	1.335	1.792	0.	2	2	
126.	00	NODE	507	1.335	1.9690	0.	2	2	
127.	00	NODE	64	1.335	2.146	0.	2	2	
128.	00	NODE	508	1.335	2.3230	0.	2	2	
129.	00	NODE	65	1.335	2.5	0.	2	2	2
130.	00	NODE	66	1.3475	0.	0.	2	2	2
131.	00	NODE	67	1.3475	0.5485	0.	2	2	
132.	00	NODE	68	1.3475	1.0968	0.	2	2	
133.	00	NODE	69	1.36	0.	0.	2	2	2
134.	00	NODE	70	1.36	0.2775	0.	2	2	
135.	00	NODE	71	1.36	0.555	0.	2	2	
136.	00	NODE	72	1.36	0.8322	0.	2	2	
137.	00	NODE	73	1.36	1.1095	0.	2	2	
138.	00	NODE	74	1.385	0.	0.	2	2	2
139.	00	NODE	75	1.385	0.658	0.	2	2	
140.	00	NODE	76	1.385	1.135	0.	2	2	
141.	00	NODE	77	1.385	1.818	0.	2	2	
142.	00	NODE	78	1.385	2.5	0.	2	2	2
143.	00	NODE	79	1.485	0.	0.	2	2	2
144.	00	NODE	80	1.485	0.568	0.	2	2	
145.	00	NODE	81	1.485	1.135	0.	2	2	
146.	00	NODE	82	1.485	1.818	0.	2	2	
147.	00	NODE	83	1.485	2.5	0.	2	2	2
148.	00	NODE	84	1.585	0.	0.	2	2	2
149.	00	NODE	85	1.585	0.568	0.	2	2	
150.	00	NODE	86	1.585	1.135	0.	2	2	
151.	00	NODE	87	1.585	1.818	0.	2	2	
152.	00	NODE	88	1.585	2.5	0.	2	2	2

END ELT. ERRORS: NONE. TIME: 1.346 SEC. IMAGE COUNT: 152

```
@ELT,DIL DATA/PLOTTER
ELT #R1 S74Q1C 11/25/80 20:18:11 (->D)
     1.          00      OFFC CYLINDER 34 THRUST CHAMBER
     2.          00        100    6    0    3   90    3
     3.          00      QUAD  1    1    1    2    1    3   17   15                        3
     4.          00      CONT  101  2    102  0    11   0   0    16   0    0    10   0
     5.          00      QUAD  2    1    1    2    3    5   19   17                        3
     6.          00      CONT  103  4    104  0    12   0   0    18   0    0    11   0
     7.          00      QUAD  3    1    1    2    5    7   21   19                        3
     8.          00      CONT  105  6    106  0    13   0   0    20   0    0    12   0
     9.          00      QUAD  4    1    1    2    7    9   23   21                        3
    10.          00      CONT  107  8    108  0    14   0   0    22   0    0    13   0
    11.          00      QUAD  5    1    1    1    15   17  31   29                        1
    12.          00      CONT  16   25   30   24
    13.          00      QUAD  6    1    1    1    17   19  33   31                        1
    14.          00      CONT  18   26   32   25
    15.          00      QUAD  7    1    1    1    19   21  35   33                        1
    16.          00      CONT  20   27   34   26
    17.          00      QUAD  8    1    1    1    21   23  37   35                        1
    18.          00      CONT  22   28   36   27
    19.          00      QUAD  9    1    1    1    29   31  45   43                        1
    20.          00      CONT  30   39   44   38
    21.          00      QUAD  10   1    1    1    31   33  47   45                        1
    22.          00      CONT  32   40   46   39
    23.          00      QUAD  11   1    1    1    33   35  49   47                        1
    24.          00      CONT  34   41   48   40
    25.          00      QUAD  12   1    1    1    35   37  51   49                        1
    26.          00      CONT  36   42   50   41
    27.          00      QUAD  13   1    1    1    43   45  59   57                        1
    28.          00      CONT  44   53   58   52
    29.          00      QUAD  14   1    1    1    45   47  61   59                        1
    30.          00      CONT  46   54   60   53
    31.          00      QUAD  15   1    1    2    47   49  63   61                        3
    32.          00      CONT  0    48   0    0    55   0   506  62   505  0    54   0
    33.          00      QUAD  16   1    1    2    49   51  65   63                        3
    34.          00      CONT  0    50   0    0    56   0   508  64   507  0    55   0
    35.          00      QUAD  17   1    1    1    57   59  71   69                        1
    36.          00      CONT  58   67   70   66
    37.          00      QUAD  18   1    1    1    59   61  73   71                        1
    38.          00      CONT  60   68   72   67
    39.          00      QUAD  19   1    1    1    69   71  75   74                        1
    40.          00      CONT  70   0    0    0
    41.          00      QUAD  20   1    1    1    71   73  76   75                        1
    42.          00      CONT  72   0    0    0
    43.          00      QUAD  21   2    1    1    74   75  80   79                        0
    44.          00      QUAD  22   2    1    1    75   76  81   80                        0
    45.          00      QUAD  23   2    1    1    76   77  82   81                        0
    46.          00      QUAD  24   2    1    1    77   78  83   82                        0
    47.          00      QUAD  25   2    1    1    79   80  85   84                        0
    48.          00      QUAD  26   2    1    1    80   81  86   85                        0
    49.          00      QUAD  27   2    1    1    81   82  87   86                        0
    50.          00      QUAD  28   2    1    1    82   83  88   87                        0
    51.          00      END
    52.          00        COMPLETED CYCLE  105
    53.          00      NODE    1              1.292180  .0000  .0000   2   2   2
    54.          00      NODE    101            1.291600  .1355  .0000   2   2
    55.          00      NODE    2              1.290750  .2710  .0000   2   2
```

56.	00	NODE	102	1.28992	.4065	.0000	2	2	
57.	00	NODE	3	1.28891	.5420	.0000	2	2	
58.	00	NODE	103	1.28832	.6775	.0000	2	2	
59.	00	NODE	4	1.28789	.8130	.0000	2	2	
60.	00	NODE	104	1.28741	.9485	.0000	2	2	
61.	00	NODE	5	1.28702	1.0840	.0000	2	2	
62.	00	NODE	105	1.28662	1.2610	.0000	2	2	
63.	00	NODE	6	1.28645	1.4380	.0000	2	2	
64.	00	NODE	106	1.28630	1.6150	.0000	2	2	
65.	00	NODE	7	1.28638	1.7920	.0000	2	2	
66.	00	NODE	107	1.28658	1.9690	.0000	2	2	
67.	00	NODE	8	1.28669	2.1460	.0000	2	2	
68.	00	NODE	108	1.28684	2.3230	.0000	2	2	
69.	00	NODE	9	1.28691	2.5000	.0000	2	2	2
70.	00	NODE	10	1.29547	.0000	.0000	2	2	2
71.	00	NODE	11	1.29326	.5420	.0000	2	2	
72.	00	NODE	12	1.29143	1.0840	.0000	2	2	
73.	00	NODE	13	1.29071	1.7920	.0000	2	2	
74.	00	NODE	14	1.29131	2.5000	.0000	2	2	2
75.	00	NODE	15	1.29888	.0000	.0000	2	2	2
76.	00	NODE	16	1.29837	.2710	.0000	2	2	
77.	00	NODE	17	1.29753	.5420	.0000	2	2	
78.	00	NODE	18	1.29667	.8130	.0000	2	2	
79.	00	NODE	19	1.29590	1.0840	.0000	2	2	
80.	00	NODE	20	1.29532	1.4380	.0000	2	2	
81.	00	NODE	21	1.29512	1.7920	.0000	2	2	
82.	00	NODE	22	1.29536	2.1460	.0000	2	2	
83.	00	NODE	23	1.29560	2.5000	.0000	2	2	2
84.	00	NODE	24	1.30256	.0000	.0000	2	2	2
85.	00	NODE	25	1.30199	.5420	.0000	2	2	
86.	00	NODE	26	1.30066	1.0840	.0000	2	2	
87.	00	NODE	27	1.29979	1.7920	.0000	2	2	
88.	00	NODE	28	1.30006	2.5000	.0000	2	2	2
89.	00	NODE	29	1.30624	.0000	.0000	2	2	2
90.	00	NODE	30	1.30643	.2710	.0000	2	2	
91.	00	NODE	31	1.30650	.5420	.0000	2	2	
92.	00	NODE	32	1.30602	.8130	.0000	2	2	
93.	00	NODE	33	1.30548	1.0840	.0000	2	2	
94.	00	NODE	34	1.30483	1.4380	.0000	2	2	
95.	00	NODE	35	1.30444	1.7920	.0000	2	2	
96.	00	NODE	36	1.30440	2.1460	.0000	2	2	
97.	00	NODE	37	1.30442	2.5000	.0000	2	2	2
98.	00	NODE	38	1.31001	.0000	.0000	2	2	2
99.	00	NODE	39	1.31079	.5420	.0000	2	2	
100.	00	NODE	40	1.31015	1.0840	.0000	2	2	
101.	00	NODE	41	1.30898	1.7920	.0000	2	2	
102.	00	NODE	42	1.30849	2.5000	.0000	2	2	2
103.	00	NODE	43	1.31419	.0000	.0000	2	2	2
104.	00	NODE	44	1.31452	.2710	.0000	2	2	
105.	00	NODE	45	1.31489	.5420	.0000	2	2	
106.	00	NODE	46	1.31505	.8130	.0000	2	2	
107.	00	NODE	47	1.31481	1.0840	.0000	2	2	
108.	00	NODE	48	1.31426	1.4380	.0000	2	2	
109.	00	NODE	49	1.31364	1.7920	.0000	2	2	
110.	00	NODE	50	1.31288	2.1460	.0000	2	2	
111.	00	NODE	51	1.31227	2.5000	.0000	2	2	2
112.	00	NODE	52	1.31865	.0000	.0000	2	2	2

113.	00	NODE	53	1.31906	.5420	.0000	2	2	
114.	00	NODE	54	1.31941	1.0840	.0000	2	2	
115.	00	NODE	55	1.31835	1.7920	.0000	2	2	
116.	00	NODE	56	1.31608	2.5000	.0000	2	2	2
117.	00	NODE	57	1.32314	.0000	.0000	2	2	2
118.	00	NODE	58	1.32321	.2710	.0000	2	2	
119.	00	NODE	59	1.32340	.5420	.0000	2	2	
120.	00	NODE	60	1.32344	.8130	.0000	2	2	
121.	00	NODE	61	1.32379	1.0840	.0000	2	2	
122.	00	NODE	505	1.32380	1.2610	.0000	2	2	
123.	00	NODE	62	1.32355	1.4380	.0000	2	2	
124.	00	NODE	506	1.32347	1.6150	.0000	2	2	
125.	00	NODE	63	1.32291	1.7920	.0000	2	2	
126.	00	NODE	507	1.32191	1.9690	.0000	2	2	
127.	00	NODE	64	1.32130	2.1460	.0000	2	2	
128.	00	NODE	508	1.32056	2.3230	.0000	2	2	
129.	00	NODE	65	1.32017	2.5000	.0000	2	2	2
130.	00	NODE	66	1.33594	.0000	.0000	2	2	2
131.	00	NODE	67	1.33605	.5485	.0000	2	2	
132.	00	NODE	68	1.33614	1.0968	.0000	2	2	
133.	00	NODE	69	1.34863	.0000	.0000	2	2	2
134.	00	NODE	70	1.34864	.2775	.0000	2	2	
135.	00	NODE	71	1.34866	.5550	.0000	2	2	
136.	00	NODE	72	1.34870	.8322	.0000	2	2	
137.	00	NODE	73	1.34865	1.1095	.0000	2	2	
138.	00	NODE	74	1.37360	.0000	.0000	2	2	2
139.	00	NODE	75	1.37360	.5680	.0000	2	2	
140.	00	NODE	76	1.37361	1.1350	.0000	2	2	
141.	00	NODE	77	1.37366	1.8180	.0000	2	2	
142.	00	NODE	78	1.37366	2.5000	.0000	2	2	2
143.	00	NODE	79	1.47341	.0000	.0000	2	2	2
144.	00	NODE	80	1.47343	.5680	.0000	2	2	
145.	00	NODE	81	1.47347	1.1350	.0000	2	2	
146.	00	NODE	82	1.47351	1.8180	.0000	2	2	
147.	00	NODE	83	1.47354	2.5000	.0000	2	2	2
148.	00	NODE	84	1.57368	.0000	.0000	2	2	2
149.	00	NODE	85	1.57366	.5680	.0000	2	2	
150.	00	NODE	86	1.57360	1.1350	.0000	2	2	
151.	00	NODE	87	1.57352	1.8180	.0000	2	2	
152.	00	NODE	88	1.57349	2.5000	.0000	2	2	2
153.	00	EXTRAPOLATED CYCLE 110							
154.	00	NODE	1	1.29225	.0000	.0000	2	2	2
155.	00	NODE	101	1.29157	.1355	.0000	2	2	
156.	00	NODE	2	1.29060	.2710	.0000	2	2	
157.	00	NODE	102	1.28967	.4065	.0000	2	2	
158.	00	NODE	3	1.28857	.5420	.0000	2	2	
159.	00	NODE	103	1.28798	.6775	.0000	2	2	
160.	00	NODE	4	1.28755	.8130	.0000	2	2	
161.	00	NODE	104	1.28705	.9485	.0000	2	2	
162.	00	NODE	5	1.28665	1.0840	.0000	2	2	
163.	00	NODE	105	1.28626	1.2610	.0000	2	2	
164.	00	NODE	6	1.28609	1.4380	.0000	2	2	
165.	00	NODE	106	1.28595	1.6150	.0000	2	2	
166.	00	NODE	7	1.28604	1.7920	.0000	2	2	
167.	00	NODE	107	1.28627	1.9690	.0000	2	2	
168.	00	NODE	8	1.28640	2.1460	.0000	2	2	
169.	00	NODE	108	1.28658	2.3230	.0000	2	2	

170.	00	NODE	9	1.28667	2.5000	.0000	2	2	2
171.	00	NODE	10	1.29537	.0000	.0000	2	2	2
172.	00	NODE	11	1.29299	.5420	.0000	2	2	
173.	00	NODE	12	1.29108	1.0840	.0000	2	2	
174.	00	NODE	13	1.29037	1.7920	.0000	2	2	
175.	00	NODE	14	1.29107	2.5000	.0000	2	2	2
176.	00	NODE	15	1.29868	.0000	.0000	2	2	2
177.	00	NODE	16	1.29813	.2710	.0000	2	2	
178.	00	NODE	17	1.29729	.5420	.0000	2	2	
179.	00	NODE	18	1.29639	.8130	.0000	2	2	
180.	00	NODE	19	1.29559	1.0840	.0000	2	2	
181.	00	NODE	20	1.29499	1.4380	.0000	2	2	
182.	00	NODE	21	1.29479	1.7920	.0000	2	2	
183.	00	NODE	22	1.29508	2.1460	.0000	2	2	
184.	00	NODE	23	1.29536	2.5000	.0000	2	2	2
185.	00	NODE	24	1.30231	.0000	.0000	2	2	2
186.	00	NODE	25	1.30175	.5420	.0000	2	2	
187.	00	NODE	26	1.30039	1.0840	.0000	2	2	
188.	00	NODE	27	1.29948	1.7920	.0000	2	2	
189.	00	NODE	28	1.29979	2.5000	.0000	2	2	2
190.	00	NODE	29	1.30594	.0000	.0000	2	2	2
191.	00	NODE	30	1.30616	.2710	.0000	2	2	
192.	00	NODE	31	1.30626	.5420	.0000	2	2	
193.	00	NODE	32	1.30577	.8130	.0000	2	2	
194.	00	NODE	33	1.30521	1.0840	.0000	2	2	
195.	00	NODE	34	1.30454	1.4380	.0000	2	2	
196.	00	NODE	35	1.30414	1.7920	.0000	2	2	
197.	00	NODE	36	1.30411	2.1460	.0000	2	2	
198.	00	NODE	37	1.30413	2.5000	.0000	2	2	2
199.	00	NODE	38	1.30969	.0000	.0000	2	2	2
200.	00	NODE	39	1.31055	.5420	.0000	2	2	
201.	00	NODE	40	1.30989	1.0840	.0000	2	2	
202.	00	NODE	41	1.30869	1.7920	.0000	2	2	
203.	00	NODE	42	1.30818	2.5000	.0000	2	2	2
204.	00	NODE	43	1.31387	.0000	.0000	2	2	2
205.	00	NODE	44	1.31422	.2710	.0000	2	2	
206.	00	NODE	45	1.31463	.5420	.0000	2	2	
207.	00	NODE	46	1.31481	.8130	.0000	2	2	
208.	00	NODE	47	1.31457	1.0840	.0000	2	2	
209.	00	NODE	48	1.31400	1.4380	.0000	2	2	
210.	00	NODE	49	1.31336	1.7920	.0000	2	2	
211.	00	NODE	50	1.31260	2.1460	.0000	2	2	
212.	00	NODE	51	1.31194	2.5000	.0000	2	2	2
213.	00	NODE	52	1.31834	.0000	.0000	2	2	2
214.	00	NODE	53	1.31878	.5420	.0000	2	2	
215.	00	NODE	54	1.31919	1.0840	.0000	2	2	
216.	00	NODE	55	1.31809	1.7920	.0000	2	2	
217.	00	NODE	56	1.31572	2.5000	.0000	2	2	2
218.	00	NODE	57	1.32284	.0000	.0000	2	2	2
219.	00	NODE	58	1.32292	.2710	.0000	2	2	
220.	00	NODE	59	1.32312	.5420	.0000	2	2	
221.	00	NODE	60	1.32318	.8130	.0000	2	2	
222.	00	NODE	61	1.32356	1.0840	.0000	2	2	
223.	00	NODE	505	1.32358	1.2610	.0000	2	2	
224.	00	NODE	62	1.32333	1.4380	.0000	2	2	
225.	00	NODE	506	1.32325	1.6150	.0000	2	2	
226.	00	NODE	63	1.32271	1.7920	.0000	2	2	

227.	00	NODE	507	1.32166	1.9690	.0000	2	2	
228.	00	NODE	64	1.32100	2.1460	.0000	2	2	
229.	00	NODE	508	1.32019	2.3230	.0000	2	2	
230.	00	NODE	65	1.31972	2.5000	.0000	2	2	2
231.	00	NODE	66	1.33566	.0000	.0000	2	2	2
232.	00	NODE	67	1.33579	.5485	.0000	2	2	
233.	00	NODE	68	1.33589	1.0968	.0000	2	2	
234.	00	NODE	69	1.34837	.0000	.0000	2	2	2
235.	00	NODE	70	1.34838	.2775	.0000	2	2	
236.	00	NODE	71	1.34841	.5550	.0000	2	2	
237.	00	NODE	72	1.34845	.8322	.0000	2	2	
238.	00	NODE	73	1.34839	1.1095	.0000	2	2	
239.	00	NODE	74	1.37335	.0000	.0000	2	2	2
240.	00	NODE	75	1.37335	.5680	.0000	2	2	
241.	00	NODE	76	1.37336	1.1350	.0000	2	2	
242.	00	NODE	77	1.37341	1.8180	.0000	2	2	
243.	00	NODE	78	1.37341	2.5000	.0000	2	2	2
244.	00	NODE	79	1.47316	.0000	.0000	2	2	2
245.	00	NODE	80	1.47319	.5680	.0000	2	2	
246.	00	NODE	81	1.47323	1.1350	.0000	2	2	
247.	00	NODE	82	1.47327	1.8180	.0000	2	2	
248.	00	NODE	83	1.47330	2.5000	.0000	2	2	2
249.	00	NODE	84	1.57346	.0000	.0000	2	2	2
250.	00	NODE	85	1.57345	.5680	.0000	2	2	
251.	00	NODE	86	1.57338	1.1350	.0000	2	2	
252.	00	NODE	87	1.57330	1.8180	.0000	2	2	
253.	00	NODE	88	1.57326	2.5000	.0000	2	2	2
254.	00	EXTRAPOLATED CYCLE 120							
255.	00	NODE	1	1.29241	.0000	.0000	2	2	2
256.	00	NODE	101	1.29150	.1355	.0000	2	2	
257.	00	NODE	2	1.29030	.2710	.0000	2	2	
258.	00	NODE	102	1.28917	.4065	.0000	2	2	
259.	00	NODE	3	1.28789	.5420	.0000	2	2	
260.	00	NODE	103	1.28728	.6775	.0000	2	2	
261.	00	NODE	4	1.28686	.8130	.0000	2	2	
262.	00	NODE	104	1.28632	.9485	.0000	2	2	
263.	00	NODE	5	1.28593	1.0840	.0000	2	2	
264.	00	NODE	105	1.28553	1.2610	.0000	2	2	
265.	00	NODE	6	1.28537	1.4380	.0000	2	2	
266.	00	NODE	106	1.28524	1.6150	.0000	2	2	
267.	00	NODE	7	1.28537	1.7920	.0000	2	2	
268.	00	NODE	107	1.28564	1.9690	.0000	2	2	
269.	00	NODE	8	1.28582	2.1460	.0000	2	2	
270.	00	NODE	108	1.28605	2.3230	.0000	2	2	
271.	00	NODE	9	1.28618	2.5000	.0000	2	2	2
272.	00	NODE	10	1.29517	.0000	.0000	2	2	2
273.	00	NODE	11	1.29247	.5420	.0000	2	2	
274.	00	NODE	12	1.29039	1.0840	.0000	2	2	
275.	00	NODE	13	1.28970	1.7920	.0000	2	2	
276.	00	NODE	14	1.29060	2.5000	.0000	2	2	2
277.	00	NODE	15	1.29828	.0000	.0000	2	2	2
278.	00	NODE	16	1.29765	.2710	.0000	2	2	
279.	00	NODE	17	1.29682	.5420	.0000	2	2	
280.	00	NODE	18	1.29585	.8130	.0000	2	2	
281.	00	NODE	19	1.29496	1.0840	.0000	2	2	
282.	00	NODE	20	1.29434	1.4380	.0000	2	2	
283.	00	NODE	21	1.29414	1.7920	.0000	2	2	

284.	00	NODE	22	1.29450	2.1460	.0000	2	2	
285.	00	NODE	23	1.29487	2.5000	.0000	2	2	2
286.	00	NODE	24	1.30181	.0000	.0000	2	2	2
287.	00	NODE	25	1.30126	.5420	.0000	2	2	
288.	00	NODE	26	1.29983	1.0840	.0000	2	2	
289.	00	NODE	27	1.29885	1.7920	.0000	2	2	
290.	00	NODE	28	1.29926	2.5000	.0000	2	2	2
291.	00	NODE	29	1.30535	.0000	.0000	2	2	2
292.	00	NODE	30	1.30562	.2710	.0000	2	2	
293.	00	NODE	31	1.30577	.5420	.0000	2	2	
294.	00	NODE	32	1.30526	.8130	.0000	2	2	
295.	00	NODE	33	1.30468	1.0840	.0000	2	2	
296.	00	NODE	34	1.30398	1.4380	.0000	2	2	
297.	00	NODE	35	1.30355	1.7920	.0000	2	2	
298.	00	NODE	36	1.30353	2.1460	.0000	2	2	
299.	00	NODE	37	1.30356	2.5000	.0000	2	2	2
300.	00	NODE	38	1.30905	.0000	.0000	2	2	2
301.	00	NODE	39	1.31006	.5420	.0000	2	2	
302.	00	NODE	40	1.30938	1.0840	.0000	2	2	
303.	00	NODE	41	1.30812	1.7920	.0000	2	2	
304.	00	NODE	42	1.30757	2.5000	.0000	2	2	2
305.	00	NODE	43	1.31322	.0000	.0000	2	2	2
306.	00	NODE	44	1.31364	.2710	.0000	2	2	
307.	00	NODE	45	1.31411	.5420	.0000	2	2	
308.	00	NODE	46	1.31433	.8130	.0000	2	2	
309.	00	NODE	47	1.31409	1.0840	.0000	2	2	
310.	00	NODE	48	1.31346	1.4380	.0000	2	2	
311.	00	NODE	49	1.31280	1.7920	.0000	2	2	
312.	00	NODE	50	1.31204	2.1460	.0000	2	2	
313.	00	NODE	51	1.31128	2.5000	.0000	2	2	2
314.	00	NODE	52	1.31772	.0000	.0000	2	2	2
315.	00	NODE	53	1.31823	.5420	.0000	2	2	
316.	00	NODE	54	1.31874	1.0840	.0000	2	2	
317.	00	NODE	55	1.31759	1.7920	.0000	2	2	
318.	00	NODE	56	1.31498	2.5000	.0000	2	2	2
319.	00	NODE	57	1.32225	.0000	.0000	2	2	2
320.	00	NODE	58	1.32233	.2710	.0000	2	2	
321.	00	NODE	59	1.32257	.5420	.0000	2	2	
322.	00	NODE	60	1.32266	.8130	.0000	2	2	
323.	00	NODE	61	1.32310	1.0840	.0000	2	2	
324.	00	NODE	505	1.32314	1.2610	.0000	2	2	
325.	00	NODE	62	1.32288	1.4380	.0000	2	2	
326.	00	NODE	506	1.32283	1.6150	.0000	2	2	
327.	00	NODE	63	1.32229	1.7920	.0000	2	2	
328.	00	NODE	507	1.32117	1.9690	.0000	2	2	
329.	00	NODE	64	1.32041	2.1460	.0000	2	2	
330.	00	NODE	508	1.31945	2.3230	.0000	2	2	
331.	00	NODE	65	1.31883	2.5000	.0000	2	2	2
332.	00	NODE	66	1.33512	.0000	.0000	2	2	2
333.	00	NODE	67	1.33526	.5465	.0000	2	2	
334.	00	NODE	68	1.33537	1.0968	.0000	2	2	
335.	00	NODE	69	1.34786	.0000	.0000	2	2	2
336.	00	NODE	70	1.34786	.2775	.0000	2	2	
337.	00	NODE	71	1.34790	.5550	.0000	2	2	
338.	00	NODE	72	1.34794	.8322	.0000	2	2	
339.	00	NODE	73	1.34788	1.1095	.0000	2	2	
340.	00	NODE	74	1.37284	.0000	.0000	2	2	2

341.	00	NODE	75	1.37284	.5680	.0000	2	2	
342.	00	NODE	76	1.37285	1.1350	.0000	2	2	
343.	00	NODE	77	1.37290	1.8180	.0000	2	2	
344.	00	NODE	78	1.37290	2.5000	.0000	2	2	2
345.	00	NODE	79	1.47267	.0000	.0000	2	2	2
346.	00	NODE	80	1.47270	.5680	.0000	2	2	
347.	00	NODE	81	1.47274	1.1350	.0000	2	2	
348.	00	NODE	82	1.47279	1.8180	.0000	2	2	
349.	00	NODE	83	1.47281	2.5000	.0000	2	2	2
350.	00	NODE	84	1.57302	.0000	.0000	2	2	2
351.	00	NODE	85	1.57301	.5680	.0000	2	2	
352.	00	NODE	86	1.57294	1.1350	.0000	2	2	
353.	00	NODE	87	1.57285	1.8180	.0000	2	2	
354.	00	NODE	88	1.57281	2.5000	.0000	2	2	2
355.	00	EXTRAPOLATED CYCLE 130							
356.	00	NODE	1	1.29256	.0000	.0000	2	2	2
357.	00	NODE	101	1.29144	.1355	.0000	2	2	
358.	00	NODE	2	1.29000	.2710	.0000	2	2	
359.	00	NODE	102	1.28867	.4065	.0000	2	2	
360.	00	NODE	3	1.28721	.5420	.0000	2	2	
361.	00	NODE	103	1.28659	.6775	.0000	2	2	
362.	00	NODE	4	1.28617	.8130	.0000	2	2	
363.	00	NODE	104	1.28560	.9485	.0000	2	2	
364.	00	NODE	5	1.28520	1.0840	.0000	2	2	
365.	00	NODE	105	1.28480	1.2610	.0000	2	2	
366.	00	NODE	6	1.28464	1.4380	.0000	2	2	
367.	00	NODE	106	1.28454	1.6150	.0000	2	2	
368.	00	NODE	7	1.28469	1.7920	.0000	2	2	
369.	00	NODE	107	1.28502	1.9690	.0000	2	2	
370.	00	NODE	8	1.28524	2.1460	.0000	2	2	
371.	00	NODE	108	1.28553	2.3230	.0000	2	2	
372.	00	NODE	9	1.28569	2.5000	.0000	2	2	2
373.	00	NODE	10	1.29496	.0000	.0000	2	2	2
374.	00	NODE	11	1.29194	.5420	.0000	2	2	
375.	00	NODE	12	1.28969	1.0840	.0000	2	2	
376.	00	NODE	13	1.28904	1.7920	.0000	2	2	
377.	00	NODE	14	1.29012	2.5000	.0000	2	2	2
378.	00	NODE	15	1.29788	.0000	.0000	2	2	2
379.	00	NODE	16	1.29718	.2710	.0000	2	2	
380.	00	NODE	17	1.29635	.5420	.0000	2	2	
381.	00	NODE	18	1.29531	.8130	.0000	2	2	
382.	00	NODE	19	1.29434	1.0840	.0000	2	2	
383.	00	NODE	20	1.29369	1.4380	.0000	2	2	
384.	00	NODE	21	1.29349	1.7920	.0000	2	2	
385.	00	NODE	22	1.29393	2.1460	.0000	2	2	
386.	00	NODE	23	1.29438	2.5000	.0000	2	2	2
387.	00	NODE	24	1.30130	.0000	.0000	2	2	2
388.	00	NODE	25	1.30077	.5420	.0000	2	2	
389.	00	NODE	26	1.29927	1.0840	.0000	2	2	
390.	00	NODE	27	1.29822	1.7920	.0000	2	2	
391.	00	NODE	28	1.29873	2.5000	.0000	2	2	2
392.	00	NODE	29	1.30475	.0000	.0000	2	2	2
393.	00	NODE	30	1.30508	.2710	.0000	2	2	
394.	00	NODE	31	1.30528	.5420	.0000	2	2	
395.	00	NODE	32	1.30475	.8130	.0000	2	2	
396.	00	NODE	33	1.30415	1.0840	.0000	2	2	
397.	00	NODE	34	1.30342	1.4380	.0000	2	2	

398.	00	NODE	35	1.30295	1.7920	.0000	2	2	
399.	00	NODE	36	1.30295	2.1460	.0000	2	2	
400.	00	NODE	37	1.30299	2.5000	.0000	2	2	2
401.	00	NODE	38	1.30840	.0000	.0000	2	2	2
402.	00	NODE	39	1.30957	.5420	.0000	2	2	
403.	00	NODE	40	1.30886	1.0840	.0000	2	2	
404.	00	NODE	41	1.30755	1.7920	.0000	2	2	
405.	00	NODE	42	1.30695	2.5000	.0000	2	2	2
406.	00	NODE	43	1.31257	.0000	.0000	2	2	2
407.	00	NODE	44	1.31305	.2710	.0000	2	2	
408.	00	NODE	45	1.31358	.5420	.0000	2	2	
409.	00	NODE	46	1.31385	.8130	.0000	2	2	
410.	00	NODE	47	1.31360	1.0840	.0000	2	2	
411.	00	NODE	48	1.31293	1.4380	.0000	2	2	
412.	00	NODE	49	1.31224	1.7920	.0000	2	2	
413.	00	NODE	50	1.31148	2.1460	.0000	2	2	
414.	00	NODE	51	1.31062	2.5000	.0000	2	2	2
415.	00	NODE	52	1.31710	.0000	.0000	2	2	2
416.	00	NODE	53	1.31767	.5420	.0000	2	2	
417.	00	NODE	54	1.31829	1.0840	.0000	2	2	
418.	00	NODE	55	1.31708	1.7920	.0000	2	2	
419.	00	NODE	56	1.31425	2.5000	.0000	2	2	2
420.	00	NODE	57	1.32165	.0000	.0000	2	2	2
421.	00	NODE	58	1.32175	.2710	.0000	2	2	
422.	00	NODE	59	1.32201	.5420	.0000	2	2	
423.	00	NODE	60	1.32213	.8130	.0000	2	2	
424.	00	NODE	61	1.32264	1.0840	.0000	2	2	
425.	00	NODE	505	1.32270	1.2610	.0000	2	2	
426.	00	NODE	62	1.32243	1.4380	.0000	2	2	
427.	00	NODE	506	1.32240	1.6150	.0000	2	2	
428.	00	NODE	63	1.32188	1.7920	.0000	2	2	
429.	00	NODE	507	1.32068	1.9690	.0000	2	2	
430.	00	NODE	64	1.31981	2.1460	.0000	2	2	
431.	00	NODE	508	1.31871	2.3230	.0000	2	2	
432.	00	NODE	65	1.31794	2.5000	.0000	2	2	2
433.	00	NODE	66	1.33457	.0000	.0000	2	2	2
434.	00	NODE	67	1.33473	.5485	.0000	2	2	
435.	00	NODE	68	1.33486	1.0968	.0000	2	2	
436.	00	NODE	69	1.34734	.0000	.0000	2	2	2
437.	00	NODE	70	1.34735	.2775	.0000	2	2	
438.	00	NODE	71	1.34738	.5550	.0000	2	2	
439.	00	NODE	72	1.34743	.8322	.0000	2	2	
440.	00	NODE	73	1.34736	1.1095	.0000	2	2	
441.	00	NODE	74	1.37233	.0000	.0000	2	2	2
442.	00	NODE	75	1.37233	.5680	.0000	2	2	
443.	00	NODE	76	1.37235	1.1350	.0000	2	2	
444.	00	NODE	77	1.37240	1.8180	.0000	2	2	
445.	00	NODE	78	1.37240	2.5000	.0000	2	2	2
446.	00	NODE	79	1.47218	.0000	.0000	2	2	2
447.	00	NODE	80	1.47221	.5680	.0000	2	2	
448.	00	NODE	81	1.47226	1.1350	.0000	2	2	
449.	00	NODE	82	1.47231	1.8180	.0000	2	2	
450.	00	NODE	83	1.47233	2.5000	.0000	2	2	2
451.	00	NODE	84	1.57259	.0000	.0000	2	2	2
452.	00	NODE	85	1.57258	.5680	.0000	2	2	
453.	00	NODE	86	1.57250	1.1350	.0000	2	2	
454.	00	NODE	87	1.57240	1.8180	.0000	2	2	

455.	00	NODE	88	1.57236	2.5000	.0000	2	2	2
456.	00	EXTRAPOLATED CYCLE 140							
457.	00	NODE	1	1.29271	.0000	.0000	2	2	2
458.	00	NODE	101	1.29137	.1355	.0000	2	2	
459.	00	NODE	2	1.28970	.2710	.0000	2	2	
460.	00	NODE	102	1.28817	.4065	.0000	2	2	
461.	00	NODE	3	1.28653	.5420	.0000	2	2	
462.	00	NODE	103	1.28590	.6775	.0000	2	2	
463.	00	NODE	4	1.28548	.8130	.0000	2	2	
464.	00	NODE	104	1.28488	.9485	.0000	2	2	
465.	00	NODE	5	1.28447	1.0840	.0000	2	2	
466.	00	NODE	105	1.28407	1.2610	.0000	2	2	
467.	00	NODE	6	1.28392	1.4380	.0000	2	2	
468.	00	NODE	106	1.28383	1.6150	.0000	2	2	
469.	00	NODE	7	1.28401	1.7920	.0000	2	2	
470.	00	NODE	107	1.28439	1.9690	.0000	2	2	
471.	00	NODE	8	1.28466	2.1460	.0000	2	2	
472.	00	NODE	108	1.28500	2.3230	.0000	2	2	
473.	00	NODE	9	1.28520	2.5000	.0000	2	2	2
474.	00	NODE	10	1.29476	.0000	.0000	2	2	2
475.	00	NODE	11	1.29142	.5420	.0000	2	2	
476.	00	NODE	12	1.28900	1.0840	.0000	2	2	
477.	00	NODE	13	1.28837	1.7920	.0000	2	2	
478.	00	NODE	14	1.28965	2.5000	.0000	2	2	2
479.	00	NODE	15	1.29749	.0000	.0000	2	2	2
480.	00	NODE	16	1.29670	.2710	.0000	2	2	
481.	00	NODE	17	1.29588	.5420	.0000	2	2	
482.	00	NODE	18	1.29476	.8130	.0000	2	2	
483.	00	NODE	19	1.29371	1.0840	.0000	2	2	
484.	00	NODE	20	1.29303	1.4380	.0000	2	2	
485.	00	NODE	21	1.29284	1.7920	.0000	2	2	
486.	00	NODE	22	1.29336	2.1460	.0000	2	2	
487.	00	NODE	23	1.29388	2.5000	.0000	2	2	2
488.	00	NODE	24	1.30080	.0000	.0000	2	2	2
489.	00	NODE	25	1.30028	.5420	.0000	2	2	
490.	00	NODE	26	1.29872	1.0840	.0000	2	2	
491.	00	NODE	27	1.29760	1.7920	.0000	2	2	
492.	00	NODE	28	1.29820	2.5000	.0000	2	2	2
493.	00	NODE	29	1.30416	.0000	.0000	2	2	2
494.	00	NODE	30	1.30453	.2710	.0000	2	2	
495.	00	NODE	31	1.30480	.5420	.0000	2	2	
496.	00	NODE	32	1.30424	.8130	.0000	2	2	
497.	00	NODE	33	1.30362	1.0840	.0000	2	2	
498.	00	NODE	34	1.30285	1.4380	.0000	2	2	
499.	00	NODE	35	1.30235	1.7920	.0000	2	2	
500.	00	NODE	36	1.30237	2.1460	.0000	2	2	
501.	00	NODE	37	1.30242	2.5000	.0000	2	2	2
502.	00	NODE	38	1.30776	.0000	.0000	2	2	2
503.	00	NODE	39	1.30908	.5420	.0000	2	2	
504.	00	NODE	40	1.30834	1.0840	.0000	2	2	
505.	00	NODE	41	1.30698	1.7920	.0000	2	2	
506.	00	NODE	42	1.30634	2.5000	.0000	2	2	2
507.	00	NODE	43	1.31193	.0000	.0000	2	2	2
508.	00	NODE	44	1.31246	.2710	.0000	2	2	
509.	00	NODE	45	1.31306	.5420	.0000	2	2	
510.	00	NODE	46	1.31337	.8130	.0000	2	2	
511.	00	NODE	47	1.31312	1.0840	.0000	2	2	

512.	00	NODE	48	1.31240	1.4380	.0000	2	2	
513.	00	NODE	49	1.31168	1.7920	.0000	2	2	
514.	00	NODE	50	1.31092	2.1460	.0000	2	2	
515.	00	NODE	51	1.30996	2.5000	.0000	2	2	2
516.	00	NODE	52	1.31648	.0000	.0000	2	2	2
517.	00	NODE	53	1.31712	.5420	.0000	2	2	
518.	00	NODE	54	1.31784	1.0840	.0000	2	2	
519.	00	NODE	55	1.31657	1.7920	.0000	2	2	
520.	00	NODE	56	1.31352	2.5000	.0000	2	2	2
521.	00	NODE	57	1.32106	.0000	.0000	2	2	2
522.	00	NODE	58	1.32116	.2710	.0000	2	2	
523.	00	NODE	59	1.32145	.5420	.0000	2	2	
524.	00	NODE	60	1.32161	.8130	.0000	2	2	
525.	00	NODE	61	1.32218	1.0840	.0000	2	2	
526.	00	NODE	505	1.32226	1.2610	.0000	2	2	
527.	00	NODE	62	1.32198	1.4380	.0000	2	2	
528.	00	NODE	506	1.32197	1.6150	.0000	2	2	
529.	00	NODE	63	1.32147	1.7920	.0000	2	2	
530.	00	NODE	507	1.32019	1.9690	.0000	2	2	
531.	00	NODE	64	1.31921	2.1460	.0000	2	2	
532.	00	NODE	508	1.31798	2.3230	.0000	2	2	
533.	00	NODE	65	1.31705	2.5000	.0000	2	2	2
534.	00	NODE	66	1.33402	.0000	.0000	2	2	2
535.	00	NODE	67	1.33420	.5485	.0000	2	2	
536.	00	NODE	68	1.33435	1.0968	.0000	2	2	
537.	00	NODE	69	1.34682	.0000	.0000	2	2	2
538.	00	NODE	70	1.34683	.2775	.0000	2	2	
539.	00	NODE	71	1.34687	.5550	.0000	2	2	
540.	00	NODE	72	1.34692	.8322	.0000	2	2	
541.	00	NODE	73	1.34684	1.1095	.0000	2	2	
542.	00	NODE	74	1.37183	.0000	.0000	2	2	2
543.	00	NODE	75	1.37183	.5680	.0000	2	2	
544.	00	NODE	76	1.37184	1.1350	.0000	2	2	
545.	00	NODE	77	1.37189	1.8180	.0000	2	2	
546.	00	NODE	78	1.37190	2.5000	.0000	2	2	2
547.	00	NODE	79	1.47169	.0000	.0000	2	2	2
548.	00	NODE	80	1.47172	.5680	.0000	2	2	
549.	00	NODE	81	1.47177	1.1350	.0000	2	2	
550.	00	NODE	82	1.47183	1.8180	.0000	2	2	
551.	00	NODE	83	1.47185	2.5000	.0000	2	2	2
552.	00	NODE	84	1.57216	.0000	.0000	2	2	2
553.	00	NODE	85	1.57214	.5680	.0000	2	2	
554.	00	NODE	86	1.57206	1.1350	.0000	2	2	
555.	00	NODE	87	1.57195	1.8180	.0000	2	2	
556.	00	NODE	88	1.57191	2.5000	.0000	2	2	2
557.	00	EXTRAPOLATED CYCLE 150							
558.	00	NODE	1	1.29287	.0000	.0000	2	2	2
559.	00	NODE	101	1.29130	.1355	.0000	2	2	
560.	00	NODE	2	1.28940	.2710	.0000	2	2	
561.	00	NODE	102	1.28767	.4065	.0000	2	2	
562.	00	NODE	3	1.28586	.5420	.0000	2	2	
563.	00	NODE	103	1.28521	.6775	.0000	2	2	
564.	00	NODE	4	1.28479	.8130	.0000	2	2	
565.	00	NODE	104	1.28415	.9485	.0000	2	2	
566.	00	NODE	5	1.28375	1.0840	.0000	2	2	
567.	00	NODE	105	1.28334	1.2610	.0000	2	2	
568.	00	NODE	6	1.28320	1.4380	.0000	2	2	

569.	00	NODE	106	1.28312	1.6150	.0000	2	2	
570.	00	NODE	7	1.28333	1.7920	.0000	2	2	
571.	00	NODE	107	1.28377	1.9690	.0000	2	2	
572.	00	NODE	8	1.28408	2.1460	.0000	2	2	
573.	00	NODE	108	1.28448	2.3230	.0000	2	2	
574.	00	NODE	9	1.28471	2.5000	.0000	2	2	2
575.	00	NODE	10	1.29456	.0000	.0000	2	2	2
576.	00	NODE	11	1.29089	.5420	.0000	2	2	
577.	00	NODE	12	1.28830	1.0840	.0000	2	2	
578.	00	NODE	13	1.28770	1.7920	.0000	2	2	
579.	00	NODE	14	1.28917	2.5000	.0000	2	2	2
580.	00	NODE	15	1.29709	.0000	.0000	2	2	2
581.	00	NODE	16	1.29623	.2710	.0000	2	2	
582.	00	NODE	17	1.29540	.5420	.0000	2	2	
583.	00	NODE	18	1.29422	.8130	.0000	2	2	
584.	00	NODE	19	1.29309	1.0840	.0000	2	2	
585.	00	NODE	20	1.29238	1.4380	.0000	2	2	
586.	00	NODE	21	1.29219	1.7920	.0000	2	2	
587.	00	NODE	22	1.29278	2.1460	.0000	2	2	
588.	00	NODE	23	1.29339	2.5000	.0000	2	2	2
589.	00	NODE	24	1.30029	.0000	.0000	2	2	2
590.	00	NODE	25	1.29979	.5420	.0000	2	2	
591.	00	NODE	26	1.29816	1.0840	.0000	2	2	
592.	00	NODE	27	1.29697	1.7920	.0000	2	2	
593.	00	NODE	28	1.29766	2.5000	.0000	2	2	2
594.	00	NODE	29	1.30357	.0000	.0000	2	2	2
595.	00	NODE	30	1.30399	.2710	.0000	2	2	
596.	00	NODE	31	1.30431	.5420	.0000	2	2	
597.	00	NODE	32	1.30373	.8130	.0000	2	2	
598.	00	NODE	33	1.30309	1.0840	.0000	2	2	
599.	00	NODE	34	1.30229	1.4380	.0000	2	2	
600.	00	NODE	35	1.30176	1.7920	.0000	2	2	
601.	00	NODE	36	1.30179	2.1460	.0000	2	2	
602.	00	NODE	37	1.30184	2.5000	.0000	2	2	2
603.	00	NODE	38	1.30712	.0000	.0000	2	2	2
604.	00	NODE	39	1.30860	.5420	.0000	2	2	
605.	00	NODE	40	1.30783	1.0840	.0000	2	2	
606.	00	NODE	41	1.30641	1.7920	.0000	2	2	
607.	00	NODE	42	1.30572	2.5000	.0000	2	2	2
608.	00	NODE	43	1.31128	.0000	.0000	2	2	2
609.	00	NODE	44	1.31187	.2710	.0000	2	2	
610.	00	NODE	45	1.31254	.5420	.0000	2	2	
611.	00	NODE	46	1.31288	.8130	.0000	2	2	
612.	00	NODE	47	1.31264	1.0840	.0000	2	2	
613.	00	NODE	48	1.31187	1.4380	.0000	2	2	
614.	00	NODE	49	1.31113	1.7920	.0000	2	2	
615.	00	NODE	50	1.31036	2.1460	.0000	2	2	
616.	00	NODE	51	1.30930	2.5000	.0000	2	2	2
617.	00	NODE	52	1.31586	.0000	.0000	2	2	2
618.	00	NODE	53	1.31656	.5420	.0000	2	2	
619.	00	NODE	54	1.31739	1.0840	.0000	2	2	
620.	00	NODE	55	1.31606	1.7920	.0000	2	2	
621.	00	NODE	56	1.31279	2.5000	.0000	2	2	2
622.	00	NODE	57	1.32046	.0000	.0000	2	2	2
623.	00	NODE	58	1.32058	.2710	.0000	2	2	
624.	00	NODE	59	1.32089	.5420	.0000	2	2	
625.	00	NODE	60	1.32109	.8130	.0000	2	2	

626.	00	NODE	61	1.32172	1.0840	.0000	2	2	
627.	00	NODE	505	1.32181	1.2610	.0000	2	2	
628.	00	NODE	62	1.32153	1.4380	.0000	2	2	
629.	00	NODE	506	1.32154	1.6150	.0000	2	2	
630.	00	NODE	63	1.32106	1.7920	.0000	2	2	
631.	00	NODE	507	1.31970	1.9690	.0000	2	2	
632.	00	NODE	64	1.31861	2.1460	.0000	2	2	
633.	00	NODE	508	1.31724	2.3230	.0000	2	2	
634.	00	NODE	65	1.31617	2.5000	.0000	2	2	2
635.	00	NODE	66	1.33347	.0000	.0000	2	2	2
636.	00	NODE	67	1.33366	.5485	.0000	2	2	
637.	00	NODE	68	1.33384	1.0968	.0000	2	2	
638.	00	NODE	69	1.34631	.0000	.0000	2	2	2
639.	00	NODE	70	1.34631	.2775	.0000	2	2	
640.	00	NODE	71	1.34636	.5550	.0000	2	2	
641.	00	NODE	72	1.34641	.8322	.0000	2	2	
642.	00	NODE	73	1.34633	1.1095	.0000	2	2	
643.	00	NODE	74	1.37132	.0000	.0000	2	2	2
644.	00	NODE	75	1.37132	.5680	.0000	2	2	
645.	00	NODE	76	1.37133	1.1350	.0000	2	2	
646.	00	NODE	77	1.37139	1.8180	.0000	2	2	
647.	00	NODE	78	1.37139	2.5000	.0000	2	2	2
648.	00	NODE	79	1.47120	.0000	.0000	2	2	2
649.	00	NODE	80	1.47123	.5680	.0000	2	2	
650.	00	NODE	81	1.47129	1.1350	.0000	2	2	
651.	00	NODE	82	1.47135	1.8180	.0000	2	2	
652.	00	NODE	83	1.47137	2.5000	.0000	2	2	2
653.	00	NODE	84	1.57172	.0000	.0000	2	2	2
654.	00	NODE	85	1.57170	.5680	.0000	2	2	
655.	00	NODE	86	1.57162	1.1350	.0000	2	2	
656.	00	NODE	87	1.57151	1.8180	.0000	2	2	
657.	00	NODE	88	1.57146	2.5000	.0000	2	2	2

END ELT. ERRORS: NONE. TIME: 4.711 SEC. IMAGE COUNT: 657

```
@ELT,DIL DATA/READER
ELT #R1 S7401C 11/25/80 20:18:08 (->0)
      1.          00      TITLE OFHC CYLINDER 34 COMPUTED CYCLE 103
      2.          00      REST   61   1   20
      3.          00      EOF

END ELT.  ERRORS: NONE. TIME:  0.256 SEC. IMAGE COUNT: 3
```

```
@ELT,DIL DATA/READER
ELT @R1 S7401C 11/25/80 20:18:09 (->0)
      1.          00      TITLE OFHC CYLINDER 34 COMPUTED CYCLE 104
      2.          00      REST   81    1    28
      3.          00      EOF

END ELT.  ERRORS: NONE.  TIME:  0.259 SEC.  IMAGE COUNT: 3
```

```
@ELT,DIL DATA/READER
ELT #R1 S7401C 11/25/80 20:18:09 (->D)
      1.           00      TITLE OFHC CYLINDER 34 COMPUTED CYCLE 105
      2.           00      REST  101   1   28
      3.           00      EOF

END ELT.  ERRORS: NONE. TIME:  0.334 SEC. IMAGE COUNT: 3
```

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